

Alan D. Reid
E. Paul Hart
Michael A. Peters *Editors*

A Companion to Research in Education

A Companion to Research in Education

Alan D. Reid • E. Paul Hart • Michael A. Peters
Editors

A Companion to Research in Education

 Springer

Editors

Alan D. Reid
Faculty of Education
Monash University
Clayton, VIC, Australia

E. Paul Hart
Faculty of Education
University of Regina
Regina, SK, Canada

Michael A. Peters
Hamilton Campus
University of Waikato
Hamilton, New Zealand

ISBN 978-94-007-6808-6 ISBN 978-94-007-6809-3 (eBook)
DOI 10.1007/978-94-007-6809-3
Springer Dordrecht Heidelberg New York London

© Springer Science+Business Media Dordrecht 2014

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

*If I envy her one thing
it is her ease with this epoch.*

– R.S. Thomas

Preface

How are things?

Good, thanks.

That's not saying very much. Would you rather I ask 'how goes it with your soul'?

Well if you want to sound anachronistic, please do.

Ouch! Remind me, what are you up to at the moment?

Still working at the university, in the faculty of education.

Ahh – training teachers.

Some of us prefer to call it 'teacher education'. But yes, that's what most of my colleagues seem to do to earn a living. I'm much more of the 'frustrated researcher' these days.

I thought your ilk called yourselves academics?

Sometimes do, mainly did. I still get to use 'academic' at airport immigration desks when the officials ask for an occupation. I just wouldn't want you to think I've much time for beard stroking with all the paperwork and marking I'm having to do.

Not very twenty-first century, are you? Do you actually like the job you are in?

When was the last time you beat about the bush? I will admit I tended to see it more as a vocation when I started, the bonus being working with smart and curious people with interesting questions and debates that kept me on my toes. You'll be telling me you've plenty of other sources for that since you graduated . . .

Ouch again. But can we avoid descending into a nostalgia fest please? We all know the grass is never any greener, even with rose-tinted spectacles. More to the point, are you actually researching anything interesting at the moment? Are you 'pushing back the boundaries'?

Well, the day job does get me out of bed. But to be fair, a lot of it is pretty tedious. Partly that's because it's become so very technical and technocratic, and must look increasingly esoteric to the uninitiated. It is funny you mention 'pushing back the boundaries'. Nice use of scare quotes and cutting to the chase – again! I'd be less hasty, and for that matter, always seem to hesitate to put it that way.

Really?

Well, you know me; I can't help but think that education and being educated are so intrinsic to what people associate with being able to live a full and fulfilling life. Yet most of our research doesn't seem to be about understanding, questioning or contributing to debates about that, particularly about what creates or sustains let alone challenges a sense of fullness or fulfilment. If I look around – even when I catch myself in the mirror – it seems researching education isn't actually in the hard or worthy category of work. It just seems to keep bouncing between the lanes of too fuzzy or too obvious . . . because we've all been to school, haven't we; you are bound to reply.

You beat me to it, but I'm not claiming to be an expert or academic, let alone a 'researcher'. *Fair point. I guess it's more my sense that most of the people I know who call themselves education researchers seem to spend most of their time preoccupied with something else. It divests the field of any really sustained disciplinary work. To any outsider it must look like most of us are mainly providing footnotes to other disciplines.*

So what does it look like to an 'insider'?

That a bigger purpose doesn't seem to haunt many of us anymore? Admitting that, or perhaps I should say, to qualify that – it won't appear that surprising that I've ended up doing a lot of consultancies, evaluations, projects – that kind of thing – since the last time we spoke. The odds of getting a research grant are increasingly poor, plus there's never much money for really 'researching education' anyway. So a lot of what I do is supposedly marked by being 'practical' and 'useful', and that's about it.

So no real intellectual cut and thrust?

Hmm.

Experiencing a bit of a drought, or you've lost your passion, which is it?

Neither . . .

So . . . is it 'no edge', or a *blunt* one? No mettle? . . . Or not being in the thick of it – is that it? Which bottle do I need to fetch to help cure your despondency?

No need for that – at least not just yet. I'm capable of wallowing a little longer! The nub of it is that I wouldn't call my research philosophically sophisticated or engaging. Or challenging – be that to myself, or my colleagues. So let's agree to say I'm not researching much at the moment by any stretch of the imagination – and none of that needs scare quotes.

Allow me to beg to differ. If I'm not to confuse this with a cartload of carping, it sounds like you still need those scare quotes. Surely there's a lot of 'cognitive dissonance' in this, and you being a 'performative contradiction' . . . At least I think that's some of the jargon you used the last time. Is it really that bad?

Well, when I started – remember when I did my PhD? – you got bored with me saying that research was about generating new knowledge, seeing things differently, challenging the status quo . . . You regularly chided me for acting like I was on some sort of superior plane, walking around with my head in the clouds – 'too smart for my own good' really stung.

Sorry! Please continue . . .

Apology accepted. But I bet you want some form of contrition from me in return?

Be my guest.

Okay. If you really want me to work through some of my baggage, I'll start with the backpack I'm still carrying from my supervisors. They were always banging on about research needing to produce some theory or evidence that was original, groundbreaking, worthwhile – something that would make a difference – even if it was small – 'tiptoeing forwards' was the usual expression. In my case, it always seemed to be tied to how we can understand education 'now', of what happens in education from such and such a 'powerful perspective', of what education is or 'could be' – that's if you really wanted to push the boat out. They wanted so much from research, and wouldn't put up with too little. With each passing semester though, their words are just fading echoes. Of course, I still use some of those lines with my students! I'll even trot them out when I want to pull someone up for being solipsistic – and that seems to be happening too frequently for my liking with some of my colleagues these days. 'Research has to be fresh'. Remember me saying that? I didn't realise it had a shelf life, or applied to researchers too!

Oh dear. I hope your puns are better in class – or perhaps you should reserve them for the senior common room.

Don't joke – you realise we don't have one of those anymore. Didn't I tell you? It went along with a load of other 'restructurings' we have had to make at my esteemed employers: in this

case, to make better use of ‘the space’. Perhaps it doesn’t actually matter as I’m finding it so much harder to juggle all the demands on my time, across my life at work and what’s left of it for home. More to the point, the internet traffic I have to avoid being crushed by is becoming increasingly unmanageable – I often wonder how you cope with it in your line of work. I wish I could just stick to switching that off, and keeping it off, like in the good old days of closing the covers of a book.

Sounds to me like you are whingeing again. But prescribing finding some routine and adopting some basic ‘time management principles’ is hardly going to help given your mood. Come on, tell me about a good idea you are working on, or about what you are reading that ignites a spark.

I wish I could, but it seems like there’s always some distraction getting in the way, with more and more papers to read and process. The notions of an end of the working week are something of a blur these days. And now there’s even alerts in our ‘online academic community’ about the latest doctoral theses uploaded from some distant shore on this great big world of ours, just waiting for me to download into my very own file space! I wish I had a bung to block the pipe! Online community – what about a real community of scholars? –

– Touché. But before you rant on, I have to ask if all this venting is actually cathartic?

Ask me later! Look, the point I was trying to make was even when I do find the time to write, I’m finding myself increasingly stuck: about what to write, about who I’m writing for, if not how best to represent what it is I want to express. I know what it is that I’m wanting to say, I just seem to need to learn a bit more about how I will need to communicate it to new audiences. On the one hand, there’s all that paying your dues to appear scholarly, and ‘sticking to the template’. It seems so incredibly constraining in these days of social media, if not stifling – if you can detect the difference. On the other, do you remember when people used to ask what ‘are you reading at university?’ Being well read is rightly assumed but you’ve got to be able to make regular investments and not just trade on the interest, if that still makes sense. And then they have the gall to ask what have you written in the last term, or should I say, month.

Give me a real example rather than another generality about your faceless administrators . . . *Sure; what incensed me about a week ago was a bit of a to do with my work-appointed ‘mentors’ in my ‘performance appraisal’. It wouldn’t be far from the truth to say that the professors in question have made a great name for themselves digging in the same quarry of ideas, year on year. No time for wider reading, or fresh writing. Their ‘outputs’ seems to amount to a little updating of the argument, a little tidying up around the edges. And no one calls them on it.*

And you don’t do that!

Of course not! Oh, I see. . . . Okay, but my point is, they think that’s the way to make your reputation as a researcher – become a professor even – because it worked for them! I beg to differ, even if it is only to myself, and you. It is so very uninspiring. I can’t think of the last time they wrote or said something truly original, but I don’t think that’s the point for them anymore – or for many in the community of education researchers I inhabit, particularly on my darker days. The academics at the university seem to have to see themselves as working more and more as if they were in industry, promoting and protecting a brand, but it’s all a façade for a rotting core. I want it to be a place, a nexus, a crucible perhaps, I’m struggling for the right words . . . for developing and refining brilliant ideas – ones that could really make a difference.

Sounds to me like you’re simmering away, hashing and rehashing old tropes. More importantly, you seem to have lost both the time and commitment to making room for the things you actually enjoy, let alone want to be able to enjoy in academia. Why don’t you hand in your notice? You always used to say we were privileged and enlightened folk, responsible for our choices and actions: have you given up on all that? The next thing you’ll tell me is your annual

leave ‘entitlements’ and a bomb-proof pension are the only things stopping you . . .

Ever the cynical realist! You know I like most of the people I work with, the students, the conferences, the sabbaticals – particularly the international ones . . . But these days we seem to spend so much of our time talking and worrying about research income, quality, accountability, ‘outputs’ and ‘impacts’, even if all that is leavened with the occasional joke about ‘how was it for you?’ I think we’re missing the point about developing our research together, being part of ‘a community of scholars’ and thrashing out a ‘generative research programme’. Perhaps it is simply some of us can’t see much point in much of what we do anymore, and have got so very good at pretending in all this game playing.

Go on . . .

Well, to put it bluntly, which is so un-academic of me, most weeks I don’t actually feel I’ve researched anything of consequence, whether that’s of consequence to me or my colleagues, let alone education or educators. If you want me to feel really depressed, I’d even have to say most semesters.

I’ll feign sympathy by offering a ‘poor you’ . . .

Thank you kindly! Received with a due modicum of courtesy proportional to that with which it was offered. Honestly, my problem is I don’t think I’ve done anything that I would count as real research since my doctoral days. Okay, I can tick all the right boxes, jump through the hoops, meet the requirements for our ‘research performance exercises’. But the itch remains. It’s a bit of a sob story when I come to think of it.

And you want to be a Professor of Education at which university?! Doesn’t sound like you’ve much to profess, let alone have managed to develop a strong sense of belief in the power or value of your research, or that of others . . . Telling you to buck up your ideas will only run aground on the irony. Come on, let’s talk about something more uplifting, or at least find you another companion to help dispel some of your woes. Are you at least up for that? –

Clayton, VIC

Alan D. Reid

Acknowledgements

We would like to extend our warmest thanks to our publishers at Springer: Tamara Welschot and Judith Terpos, for their faith in this *Companion* and patience during its long gestation, and for such excellent work on the final manuscript.

Our thanks also go to successive groups of graduate students at our institutions. Their puzzles and dilemmas about how research in education is understood and practiced convinced us of the need for such a book. It is their curiosity and critical discussions that have proven invaluable in shaping the framework and content of this collection.

We are also indebted to the many colleagues who have provided the intellectual stimulus to hone the *Companion's* themes and content. While it is impossible to acknowledge everyone who has contributed to this text, there are critical friends and colleagues who have been highly supportive to this enterprise. In addition to the contributors to this collection, we are especially grateful to the following for their conversations and challenges about the book: Bill Scott, Bob Stevenson, Phillip Payne, Kelly Teamey, Susanne Müller, and the magnanimous Connie Russell.

We also acknowledge the catalytic role that Patrick Brindle played during the early stages of this project, particularly his enthusiasm and critical feedback on the initial proposal.

Finally, we owe a deep debt of gratitude to the younger and more established contributors to this volume: for the generosity and insights of their ideas and argumentation, their continued commitment to this project as it has ebbed and flowed, and the opportunities its completion now affords our various scholarly communities in critically and creatively researching education.

The book is dedicated to the staff, students and alumni of the Department of Education, University of Bath.

Authors and editors also wish to thank the publishers noted for permission to reproduce the following copyright material in this book:

Material from Elsevier

Phillips DC (2006) A guide for the perplexed: scientific educational research, methodolatry, and the gold versus platinum standards. *Educ Res Rev* 1(1):15–26

Material from Open University

Nolan K (2005) Publish or cherish? Performing a dissertation in/between research spaces. In: Barnett R (ed) *Reshaping universities: new relationships between research, scholarship and teaching*. McGraw-Hill/Open University Press, Maidenhead, pp 119–135

Material from Pergamon Press

Robinson VMJ (1993) *Problem-based methodology: research for the improvement of practice*. Pergamon Press, Oxford

Material from Routledge

Kenway J, Bullen E, Fahey J, Robb S (2006) *Haunting the knowledge economy*. Routledge, Abingdon

Material from Sense Publishers

Nolan K (2007) How should I know? Preservice teachers' images of knowing (by heart) in mathematics and science. Sense Publishers, Rotterdam

Hurren W (2009) The convenient portability of words: aesthetic possibilities of words on paper/postcards/maps/etc. In: Pendegast M, Leggo C, Sameshima P (eds) Poetic inquiry: vibrant voices in the social sciences. Sense Publishers, Rotterdam, pp 229–238

Material from University of Illinois Press

Biesta GJJ (2007) Why 'what works' won't work: evidence-based practice and the democratic deficit of educational research. *Educ Theory* 57(1):1–22

Alan D. Reid, E. Paul Hart, Michael A. Peters

Contents

Part I Conceptualising Research in Education

1	Conceptualising Research in Education: Challenging Concepts and Conceptions	3
	Alan D. Reid	
2	Traditions of Inquiry in Education: Engaging the Paradigms of Educational Research	13
	Hanan A. Alexander	
3	Traditions of Inquiry: Should We Talk of Different Paradigms After All?	27
	Richard Pring	
4	The Discipline(s) of Educational Research	31
	David Bridges	
5	Changing Scholarly Lives: Neoliberalism, Discipline(s) and Educational Research	41
	Peter Roberts	
6	The Problem with ‘Disciplines’ of Educational Research	47
	Hugh Lauder	
7	The Pursuit of Truth(s) in Educational Research	51
	Stefan Ramaekers	
8	Providing a Space to Enable Alteration in Educational Research	61
	Stijn Mus	
9	The Design(s) of Educational Research: Description and Interpretation	67
	Paul Smeyers	
10	Relativism, Research and Social Responsibility: Some Remarks Inspired by Smeyers, Wittgenstein and Lyotard	77
	Andrew Stables	
11	“This Truth That I Say to You, Well, You See It in Myself”: On Research As Education As Philosophy As a Way of Life	83
	Maarten Simons and Jan Masschelein	
12	On Incompetency and Care for the Self as Conditions for Educational Laboratories	97
	Joris Vlieghe and Mathias Decuyper	
13	‘Education Is the New Philosophy’, to Make a Metadisciplinary Claim for the Learning Sciences	101
	Mary Kalantzis and Bill Cope	

14	Education, Science and the Lifeworld: A Response to “Education Is the New Philosophy”	117
	Norm Friesen	
Part II Characterising Research in Education		
15	Characterising Research in Education: Troubling Characteristics and Caricature	123
	Alan D. Reid	
16	A Guide for the Perplexed: Scientific Educational Research, Methodolatry, and the Gold Versus Platinum Standards	129
	D.C. Phillips	
17	Perplexing Times in Educational Research and the Prospects for a New Platinum Standard	141
	Jānis Ozoliņš	
18	Educational Research as Science?	145
	Darrell P. Rowbottom	
19	Educational Research and the Light of Science	155
	Richard Smith	
20	Educational Research as Science? A Critical Question	159
	Sarah Aiston	
21	The Logic of Causal Investigations	163
	Michael Scriven	
22	The Logic of Causal Investigations and the Rhetoric and Pragmatics of Research Planning	173
	Melvin M. Mark	
23	Theory, Practice and the Philosophy of Educational Action Research in New Light	177
	Marianna Papastephanou	
24	Immanent Transcendence in Educational Research	189
	Olav Eikeland	
25	When Will I Be a Teacher?	193
	Paul Gibbs	
26	The Role of Meta-analysis in Educational Research	197
	John Hattie, H. Jane Rogers, and Hariharan Swaminathan	
27	Using Educational Research as a Resource for Continuous Improvement in Education: The Best Evidence Syntheses	209
	Adrienne Alton-Lee	
28	Framing and Analysing Educational Research: A Recent History of Transactions from a Foucauldian Perspective	215
	Mark Olssen	
29	Using or Mobilizing Foucault? Choice Remarks on Eclecticism and Trends in Educational Research	229
	Andreas Fejes	
30	On Understanding Power and the Subject of Educational Research	233
	Naomi Hodgson	

Part III Contextualising Research in Education

31	Contexts, Contextualism and Contextualizing Educational Research	239
	Michael A. Peters	
32	Dialectics of Race Criticality: Studies in Racial Stratification and Education	247
	Zeus Leonardo	
33	What It Means To Be Critical: Beyond Rhetoric and Toward Action	259
	Gloria Ladson-Billings	
34	On Being “Race Critical”	263
	Michael W. Apple	
35	Untangling Theories and Hegemonic Projects in Researching Education and the Knowledge Economy	267
	Susan L. Robertson	
36	The Knowledge Economy as Global Assemblage	277
	Jane Kenway	
37	The Creativity Imperative: Implications for Education Research	281
	Cushla Kapitzke and Stephen Hay	
38	Reimagining Creativity: Critically, Ethically, and Practically	289
	Phil Graham	
39	The More Things Change, the More They Stay the Same: Creativity as the Next Colonial Turn	293
	Karen L. Martin	
40	Education and the Creative Economy: Not Just a Question of Ends-in-View?	297
	Justin O’Connor	
41	Beyond the Giving and Taking of Accounts: Time, Space and the Social in Educational Research with Youth	301
	Marcia McKenzie	
42	Temporality and Identity in Youth Research	311
	Julie McLeod	
43	Towards Accountability and Responsibility: Meditations on Engaging the Uneven, Murky and Messy Path Towards Justice with Youth and Community	315
	David Stovall	
44	Culture in International and Comparative Education Research: Conceptual and Methodological Issues	319
	Mark Mason	
45	Understanding International and Comparative Education Research	333
	Mark Bray	
46	Reducing the Research-Practice Gap Through Problem-Based Methodology	341
	Viviane M.J. Robinson	

47	Reflections on Problem-Based Methodology	353
	Brian D. Haig	
48	The Research-Practice Gap and How to Fill It	357
	Stuart McNaughton	
Part IV Legitimizing Research in Education		
49	Questions of Legitimacy and Quality in Educational Research	363
	Paul Hart	
50	Quality in Educational Research	375
	John K. Smith	
51	Questions of Quality in Educational Research	387
	Martyn Hammersley	
52	Evidence Based Practice in Education: Between Science and Democracy	391
	Gert Biesta	
53	Philosophy Is Not Enough: Inserting Methodology and Politics into the Space Between Science and Democracy	401
	Harry Torrance	
54	The Politics of Legitimizing Research	407
	Phil Hodgkinson	
55	The Politics of Legitimizing Research: A Case with Commentary	417
	Deborah J. Gallagher	
56	Course Team Fictions: Living with the Politics of Legitimizing Research . . .	421
	Miriam Zukas	
57	Criteria Judgements in Education: Knowledge and Research	425
	David Scott	
58	Quality Criteria in Educational Research: Is Beauty More Important Than Popularity?	433
	Terence Karran	
59	Legitimation in Post-critical, Post-realist Times, or Whether Legitimation?	443
	Bronwyn Davies	
60	Provocative/Provoking Legitimation	451
	Eve Tuck	
61	Evolving Ethics of Educational Research	457
	Robin McTaggart	
62	Ethics, Power and Intellectual Virtue: Doing Right in a Diversified Educational Research Environment	471
	David Bridges	
Part V Representing Research in Education		
63	Destabilizing Representation of Research in Education	479
	E. Paul Hart	
64	Historical Trends and Contemporary Issues in Representing Research in Education	489
	John Schostak	

65	Whose Research? Whose Reality? The Identity Politics of Education Science	499
	Georgina M. Stewart	
66	Inscriptions in Educational Research	503
	Michael Roth	
67	Visual Representations in Educational Research	513
	Lilian Pozzer-Ardenghi	
68	The heART of Educational Inquiry: Deconstructing the Boundaries Between Research, Knowing and Representation	517
	Kathleen Nolan	
69	Mapwork: Atlas Interrupted	533
	Wanda Hurren	
70	Startling Stories: Fiction and Reality in Education Research	539
	Carl Leggo and Pauline Sameshima	
71	Fictional Characters in Narrative Research Writing	549
	Natasha G. Wiebe	
72	What if I Don't Get It Right?	555
	John J. Guiney Yallop	
73	Representations 1.0, 2.0, 3.0	559
	Lisa Korteweg	
74	Responding to Environmental Crises Through Multi-media Hypertextual Research Representation	569
	M.J. Barrett	
75	The New Openness in Educational Research	575
	John Willinsky	
76	How Open Publishing Tools Are Changing Research Representation: An Account of Early Open Journal System Users	583
	Mia Quint-Rapoport	
77	Making Public Educational Research: Enabling Impact as Integral to the Educational Research Process	587
	Tirupalavanam G. Ganesh	
	Index	591

Introduction

Everything good has been thought before
one has only to try, to think it again.
(Johann Wolfgang von Goethe)

If researching education can be likened to working on a wiki – that is, a continuous, participatory, distributed work in progress – it has its particular forms, versions, updates, edits, inaccuracies, disputes, and most importantly, an abiding sense of incompleteness. We often assume the researching of education is practiced because it promises the production of new knowledge, that is warranted, of various kinds and qualities, about the phenomena, experience and concepts of ‘education’. Against Goethe though, research is unlikely to be primarily about the act of recovery, as if research were about looking again, as in putting the stress on *re*-searching. Rather, as with the old French, *rechercher*, it speaks of a need to inquire deeply, intensely, systematically and regularly, into the various realities and possibilities of educational ‘things’ across a range of contexts and situations.

This twin impulse, to take education seriously and continually inquire of it, is hemmed in by a simple recognition that horizons change. Be they informed by, for example, matters political, economic, cultural or social, what have become historic and contemporary educational priorities can be seen to get stuck as much as change, and can be challenged if not occasionally overturned. Complications in the ‘common sense’ of the field of education inevitably arise from the interplays of such broader factors and events, translated as these are into the enduring and newer configurations of the moments and momentums affecting education today, and in the days hereafter. Again, amid all this, we commonly expect both competent researchers and critical users of educational research to be capable of understanding and testing the claims made from the researching of education. Why does this seem to matter so much?

Research, from both empirical and theoretical perspectives, is widely expected to have a bearing on public debates about education, and thus be available for public scrutiny. Mindful of these expectations, reflexive researchers, we will argue, are those that produce insightful inquiries in and about education that are attentive to the needs of the field’s various audiences – not just their immediate and distanced (be that by time and space) ‘research community’. In our view, reflexivity about research in education is best served by researchers adopting an attitude of humility towards the confidence that can be attributed to claims making and meaning making. In other words, we are likely to stand firmer when we engage with a community of disciplined minds and considered scholarship, and in so doing, become better able to withstand the strong winds of academic critique and public criticism as we work shoulder-to-shoulder with others, remaining both attentive and subject to various rebukes and encouragements.

We raise these ‘personal’ matters early on in our Introduction because we recognise that the company one is able to keep in terms of other researchers, ideas, data, and theories, is always circumscribed by limitations of one sort or another. In fact, who is it that has the time to always be reading more, writing more, critiquing and re-analysing? As noted in our Preface, some may squirm and squeal in the face of a performatively-driven academic life, while to pretend it

is otherwise may also limit the public discourse on what researchers both claim and pretend to understand and know. Really, yes, really: *understand and know*. Isn't most of research debate about that which is compelling and worthwhile as educational research questions, practices and findings, including how these are developed, advanced, communicated, accommodated, discredited and even rejected?

Given such initial remarks, our purpose in preparing this *Companion* has been to provide the inquisitive reader with access to a range of contemporary conversations and debates about researching education, including those concerning its recent histories and challenges, framings and dynamics. *Because not doing so risks misconstruing what it has been, has become, or might even be*. Across the *Companion's* various parts, we offer three main contributions to advance this purpose. First, its chapters and supplementary materials offer distinct perspectives on how researching education is variously conceptualised, characterised, contextualised, legitimated, and represented. To achieve this, each part traces and assesses developments in relation to each thematic and juxtaposes these with contemporary expressions and debates regarding different aspects of that selfsame theme. Second, it demonstrates how pressing issues and problems pertaining to the researching of education are brought to bear in current concerns and debates concerning the quality and qualities of educational research. In particular, contributions examine the implications of not just how research in education is framed given a diversity of possibilities and options, but also how it is nevertheless constrained as *educational* research, given the philosophical, political, pragmatic and pedagogical pressures on this field – and as again, with a brief nod to our Preface, in preparing, inducting, developing and sustaining the field's researchers. Third, through each part's introductory chapters, we aim to identify some specific directions, priorities and prospects for future deliberations on researching education, that we hold might better contribute to and advance the dialogues and debates about how researchers of education are sensitised, equipped and become competent, particularly in addressing the rigorous demands and dynamic challenges of researching education in these times.

Some of our assumptions in pursuing such goals inevitably require clarification. We hold that research in education is well served by both impassioned reasoning and systematic instruction on the themes and frameworks of conversations and debates about research *and* education. In fact, this is what we hold to be the standard fare of conference proceedings, monographs, journals, handbooks and textbooks on education and its research. Yet as the volume of text and transaction grows, considered reflection that takes stock of core issues always seems to be dwarfed by the noise accompanying the latest innovation or fashion in researching education, if not to recognise the digging in of some heels, in some quarters, in the face of all this 'change'.

Despite the hyperbole lacing the above, as distinct modes of communication about research in education, there remains the serious risk that any particular text on educational research (and the reading thereof), ends up 'falling between two stools'. On the one hand, authors might rightly assume there is a case for specialist knowledge and needs in research experience and expertise on the part of the reader; on the other, generic knowledge and a familiarity with the requisite terms and terrains of the debate in question may recede from view.

The peril we discern here is that the bandwidth of discussions of educational research framed in the most conventional of ways becomes ever locked into polarised sets of expositions and appraisals of research by people working either too far within a discipline or subfield, or conversely, too far across them. And thus, such disciplinary and transdisciplinary dispersions both create and recreate silo mentalities that offer little to the reader by way of a substantive and engaging middle ground.

If this gambit holds some truth about how we communicate and engage educational research activity and priorities, what might be possible if we attempt to rework it via the frame of a collection on researching education, such as in a *Companion*? Clearly there are many useful ways of offering substantive commentary on research undertaken in the name of education. But it does not have to default to the reference work of a more standard kind,

let alone mimic the work of a research catalogue, dictionary or encyclopaedia. Numerous education research handbooks have attempted to provide openings and guidance to students, teachers and supervisors of research in education, as they seek insights (and answers) to complex research questions from what appears to be an ever-widening pool of methods and methodologies. As researchers and educators with a wide range of experience, questions and challenges, we see a need to address these – yet also the issues that overlie or/and underpin particular genres, principles, outcomes and perspectives. Thus our conviction has been that researchers, academics, practitioners and research users would value a *Companion to Research in Education* that engages both the broader and deeper aspects of theorising, critiquing and advancing thinking and practice across the fields and claims of educational research.

So, rather than fit this *Companion* to the usual regimen of texts on researching education, we have endeavoured to take a fresh approach in how we might understand educational inquiries to be designed, critiqued and developed.

About the Companion

The notions of frames and framing remain important throughout this *Companion*. The terms offer vivid metaphors as well as organising principles for the conceptual underpinning, organisation and content of each of its parts. The noun speaks of the structures used wittingly or not to variously view, enter, weave, print, enclose, surround, mould, and imagine our inquiries. Some speak of our bodies having frames, some extend the notion to the universe too. Both senses invite reflection on constitution and form. Closer to home, perhaps we might consider the ‘frames’ in our pictures, photographs, and movies – particularly as we consider what is kept in and out of the fragments, moments and stories before us. Or we might entertain the notions and applications associated with a frame of mind, frame of reference, or being framed. Shuffling towards the verbal sense, our attention may be drawn to matters of how one might prepare, create, formulate, and articulate research in education. We might even trace these senses back to their Old English origin – *framian* – which stresses a notion of ‘usefulness’. Consequently, we might ask ourselves, what might it mean for a particular research frame to be useful to education, or have research made ‘ready for use’?

With such conceptual and linguistic sensitisers to hand then, as the self-appointed editors of the emerging idea of a *Companion* text, we might also recognise that a general research text framed by chapters that rehearse how we design, plan and practice research has become an all too conventional framework. But also, and for our immediate purposes here, it does not have to be that way. Do we really need another text surveying and appraising research choices, methods, technologies and techniques in education? There are many excellent handbooks, textbooks, journal articles, and monographs available for those who wish to consult such texts further. Rather, for this *Companion*, might we invite the reader to pursue a road less travelled, so to speak, with our point of departure being that of reflecting on some of the enduring and recurring questions we seem to now face in our lives as practitioners, teachers and students of research in education?

Discussing an initial idea for a *Companion* with our Masters and Doctoral students in three distant continents, we seemed to be increasingly asked a similar set of questions. Why was it that some researchers of education didn’t always seem to think about particular relationships between educational theory and research in their particular projects? Must educational researchers and teachers of education research privilege certain values and ethics in the research process and some rather than other ‘research designs’? Is the ‘curriculum’ of research training too haphazard so to speak, more a matter of chance (who’s hired or available to teach the course, say), rather than a deliberately (and deliberately) strategic set of ‘conversations’? And finally, why is it that some seek generative intersections in, for example, participatory or holistic methods for generating research questions, the data collected and its analysis – before

or beyond the invitation, or requirement, to demonstrate ‘fitness of purpose’ or ‘sound design’?

In response, we might well have agreed these and other such questions are important matters, and set assignments accordingly. Of course, researching education requires drawing from a repertoire of conceptual and craft knowledge and skills to prosecute a timely and worthwhile inquiry. But then again, we know – yes, really know – this is not the be all and end all of ‘research training’ and ‘professional development’. In other words, we simply cannot accept that ‘methods and methodological talk and work’ is an all-sufficient frame for developing our judgements and priorities concerning what counts in research, particularly as this relates to establishing the quality and qualities expected and contested in researching education.

Thus the maelstrom out of which the framing of this *Companion* grew was an on-going sense and appreciation of the critique of such recognitions, noting their frequent resurfacing in our teaching, scholarship and discussions about the histories and uses of educational research in a range of contexts. What, indeed, could be said for classrooms to staffrooms, national policy frameworks to international education research conferences, and for local initiatives to UN-sponsored ‘Decades of Education’?

Emerging from this, we recognised that the prevailing focus on research process and phases of inquiry in preparatory and introductory graduate research texts could help raise awareness and debate about perspectives and traditions in methodology, but usually in ways that eclipsed those of epistemological and ontological considerations. Moreover, the approaches we saw in many Masters and Doctoral courses did not necessarily engage wider questions about the axiological, historical or cultural; that is, ‘typically’, a standard preparation and commentary on education research wouldn’t be that which necessarily dwelt for long on questions of the nature of the researchable, and what is (to be) valued and pursued as research, whether that be *in*, *about* or *for* education. In other words, we saw much contemporary discourse and practice on research in education as serving to either overly sharpen or increasingly blur distinctions about objects, subjects and relations, particularly in borrowing ideas from other fields to reinvigorate the concepts and values that influence and come to inform the conduct of education and research, if not their mutual constitution and evaluation.

Again, roughly speaking, if preparation and accounts of research in education come to focus on (even grind through) a range of alternative frameworks for what we want to find out about some particular aspect of education – such as by identifying key choices in setting or as a sample in an educational context (typically institution or a text), collecting appropriate data (often from its ‘primary stakeholders’ or ‘records’: students or teachers or policy makers; via transcripts, documents, images, etc.), and analysing the data to write up the results with a practice or policy focus in mind – then we could, and arguably should, consider reframing this account of the activity, in more compelling and fresher ways, within the form of a *Companion*.

This is because our advanced level students increasingly expected to reject a cookbook approach, to be ‘as chefs’; that is, able to make sound and leading-edge decisions about research and researchers in education concerning:

- Where conceptualisations, problems and questions *about* and *for* research in education come from?
- How aims, purposes and rationales for instances of research are established?
- Why which epistemological, ontological, axiological and methodological approaches might be taken or (best) avoided given their research questions?
- How and why research projects are influenced, designed and conducted in particular ways?
- For whom and how is research reported and communicated amid a range of audiences?
- What might happen to a research inquiry once it has been completed?

Moreover, as in other fields of inquiry, while an instance and aggregate of research in education can be as broad as it is narrow, or shallow as it is deep, in the specific case of educational research we also noted that many entering the field are (or were) mid- or

late-career educators or education administrators. For research to count to them intellectually, professionally and practically, it is often assumed that it must make good sense and be trustworthy as research *for education*, as well as in relation to its implications for the research community, directly or indirectly.

This is not a wholly unproblematic position to base a research handbook upon, let alone form a basis for the self-description of research and researchers (experientially or conceptually). Why? We reasoned that whether educational research is conventionally conceived, or in ways that demonstrate a requisite variety of possibilities, what is at issue is what might be regarded as ways in which to examine the essentially socio-cultural habits of researching education, including the dispositions and agendas of researchers, and their – even our – ‘habits of mind’. A person is formed as a researcher, not born as one. Given this, we should invite reflection on associated and particular histories, and the identities and purposes at work in the people that have come to labour in this research field – and of course, when and where we or they are able to enjoy the fruits of such labours.

Furthermore, based on our experience with academic colleagues, research students, existing literature and ‘research methods training’, it is our view that many existing texts used on educational research courses (whether as manuals or resources), do not necessarily promote careful and structured critique of the *role and contexts* of traditions, possibilities, and decisions – or their *shapings and consequences* – particularly when practitioners and administrators or policy-makers (and others) are engaging with, and in, researching education.

For example, in straining at the ‘academic’ equivalent of ‘political correctness’, some research training and professional development courses may provoke much (purported?) genuflection amongst new and seasoned scholars; but the sessions on these can also be off putting and limit users’ and novices’ engagements with the backgrounds and trajectories of the researching of education. On the one hand, we become all too familiar with the problems of studies that resort to positioning research methods as largely decontextualised and ahistorical tools deployed from a toolkit or recipe book that (not?) ‘everybody uses’; on the other, we may be presented with what appears to be a never ending labyrinth of ideas and critiques that all but the most dedicated initiate wishes to fathom or traverse.

To us, the importance of traditions, possibilities and decisions to the texts we read and engage for researching education will always be more than simply about attending to matters of craft, technique or quality assurance in research design. Equally, concepts of research professionalism must eschew checklists for successfully prosecuting a particular kind of research project, as much as others bridle over emphatic or unthinking declarations that ‘this inquiry’ counts as an instance of ‘this’ or ‘that’ kind of research because it has invoked, for example, such or such a ‘big name’. Rather, in navigating how we might reconfigure the ways in which a reference text operates as a manual and resource, we find ourselves asking how, as a *Companion*, such a text is designed to engage theoretical frameworks and core substantive issues associated with various approaches to, and examples of, researching education, as *educational research*.

So for this *Companion*, firstly, we considered this might be achieved through preparing a collection of contributions that prompts deliberation about how, either singly or together, authors manage to address a number of key dimensions and problematics within broader concerns about, and settings for, researching education. As we illustrate in the Introduction to each part, in this *Companion*, we focus on, *why, in terms of research purposes, evidence, authority, representation and legitimation, some traditions and practices have come to count, and others are disputed* – and hence, *how it is, and on what and whose grounds, the theorising, critique and advancement of thinking and practice has occurred, and hence might otherwise take place in educational research*.

Relatedly, we then sought to capture and express the changing contexts of this field of inquiry, and its burgeoning diversity and eclecticism. We have focused on what we might broadly count as social and political contexts in this *Companion*; others close to our hearts

concern the ecological and relational (these will have to wait for other publishing opportunities!). Suffice to say, educational research is now recognised as focusing on a broad field of ideas and practices that extends far beyond the terrain and narrower confines of the traditional introductory undergraduate and graduate courses about researching the classroom and curriculum, or even more simply, inquiries about learning and teaching. It has thus been important for us to show that interests in researching education extend to a range of perspectives, settings, organisations and institutions which are beyond conventional educational contexts, like schools, as well as the topics of traditional foundations courses in education. Thus there are a range of issues, themes, and topics in this *Companion* not commonly found on the aforementioned educational programmes: the question of their selection here remains though, in terms of how these have traction on contemporary ‘concepts’ and ‘characterisations’ of educational research, as much as the ‘contexts’ for inquiry, their ‘legitimation’ and indeed, their ‘representation’.

For us, this attempt to broaden interest and debate in these ways was never simply a question of whether to inject yet more philosophy, psychology, sociology, history or anthropology into the body of educational scholarship (where the list is often expressed in terms of a return to matters of foundations, or establishing new ones, even under the guise of post-foundationalism). Rather, it has required us to grasp the nettle of whether it might be better conceived as a question of how educational research and researchers address the impact, problematics and challenges of researching educational phenomena in informal and non-formal contexts and settings (be those spatially and/or temporally delimited).

To bring these introductory remarks together then, in this *Companion* our frame has become that of presenting a range of perspectives and discussions on how researching education has been, is, or could be understood in relation to our five sensitising constructs. These are, how research in education is variously *conceptualised*, *characterised*, *contextualised*, *legitimated* and *represented*. While each aspect can be used as a differential, each also cascades into further questions and themes prompted by the others. Thus we prefer to imagine the parts referenced to each sensitiser as kaleidoscopic (rather than telescopic or microscopic) lenses for reflecting on educational inquiry. Readers might then trace themes via a ‘structured multi-lensed’ reading strategy, regarding diverse perspectives as to what seems to count and why, as compelling research purposes, theories, evidence, and approaches.

To illustrate, one might enquire about the *contextualisation of research* in discussing the background, history, social formations, policy settings, and so on, of a study or research programme in education, but equally this dimension might also invite us to consider how and why researchers establish that this should be the case. Similarly, considering how we *conceptualise research in education* might prompt questions and reflections about the (competing?) purposes, procedures and authority of methods for a particular inquiry, such as how meaningful or justifiable a particular research design (process) might be for a research question, even as it might also set out to trace the warrant for argumentation within particular epistemes. Furthermore, discussing *research representations* might well engage considerations of how researchers articulate aspects associated with the ‘livedness’ and ‘embodiedness’ of gathering and analysing ‘evidence’ from a variety of sources, such as people’s stories and impressions, documents and records, situations and datasets, particularly but not exclusively in terms of the (in)visibility of encounters between the researcher and researched in empirical studies of education. But this might also be alongside that of, say, considerations of the ethics and politics of the research process, and how these are (not?) recounted and represented in the ‘final text’. Thus, questions of *legitimising research* might, amongst other things, speak to matters of how a project is justified or legitimated as educational research, such as in terms of its lifeworld coherence, relevance or depth, as well as the conceptual adequacies of the study’s design, warrants for its claims, ontology and/or epistemology.

Expressed in such kaleidoscopic ways then, it becomes clear that the key dimensions to our *Companion* can be imagined and made to *cut across and interact* with a range of instances that disrupt approaches typified by the conventions, traditions and approaches to discussing

research in education as found in many standard approaches to research texts. Put bluntly, it is not simply a case of choosing between quantitative, qualitative or mixed approaches. But we might also expect another layer, asking what might this all look like in reality? In more detail, for each part:

- **Conceptualising Research in Education** addresses key themes from critical accounts of the various traditions, disciplines and approaches involved in conceptualising research in education. It encourages us to appraise the purposes and foundations attributed to research in education across quantitative, qualitative and mixed approaches, in relation to questions raised here and in other parts on establishing and debating purpose, philosophy, tradition, discipline, rigour, language, argument, theory and evidence – and their transformation as educational research.
- **Characterising Research in Education** addresses the values, logics and principles of what is deemed to characterise research in education as a researching of education, if not *educational research*; for example, considering the purposes and underpinnings across approaches (in the classroom, experimentally and non-experimentally, with and by teachers, etc.), alongside matters of research regarded as science, problem-solving, innovation, creative, holistic, philosophical, quality and/or standard, through reference to examples of current educational research projects and initiatives – and debates.
- **Contextualising Research in Education**, as a lynchpin to the *Companion*, questions the trends, challenges, and problematics of how research in education is contextualised, and in so doing, how contexts might work with or against the grain of educational research, be that politically, socially, culturally, economically, personally, philosophically, theoretically, ideologically, and so forth.
- **Legitimising Research in Education** returns us to questions of our responsibility as educational researchers to attend to issues such as what counts as knowledge or evidence within and across various traditions of educational inquiry, as these pertain to notions of quality, who judges, on what basis, and in whose interest it is to engage arguments about, say, objectivity and subjectivity, and whether criteria in reflexive dialogue can direct us toward the improvement of research practice in education.
- **Representing Research in Education**, which again, refracts and reframes the preceding contributions, to raise various issues regarding the decisions education researchers might make on what, who and how research in education is presented and represented, from start to unfolding and concluding, alongside the practical, ethical and political implications of those decisions for researchers, participants, research users and audiences with differing research traditions, perspectives and expectations.

To illustrate further the kaleidoscopic nature of these many and varied concerns, when researchers are invited to formulate and articulate a good research question, a fundamental expectation is typically that of appraising what is already known about the research area, what is researchable (which implies some limit to the research), and what is reasonable given the timeliness, logistics and scope of the project.

This is often discussed in ‘textbook terms’ in relation to how to ensure one’s literature review is systematic, comprehensive and relevant. Important as those qualities are, an underlying issue here is not to let ‘the tail wag the dog’. Working backstream, the qualities of the reviewed studies, and their actuality as examples of ‘good educational research’ necessarily interact with matters of how the inquiries were conceptualised, characterised and legitimated, e.g. epistemologically in terms of a range of perspectives on what counted as knowledge about the educational phenomena in question, and how that might be gathered and combined, is contested, if not how knowledge is produced and made to count in and across various contexts.

Here then, we are inevitably invited to reflect on the intellectually-driven purposes for the data collections and the spatio-temporal conditions within which that happened, before we can attempt to generalise studies from one setting or context to another, i.e. discerning what is crucial to how the research might be contextualised and represented here or/and elsewhere.

We raise this because we cannot but see research and researching as mindful endeavours, even if this is not always communicated in a set of ‘findings’. Whatever form these take, they are characterised by a particular set of qualities for the project, for example, owing to the participants in the study (e.g. researchers and researched and their relations), as well as its logistics and precedents. It may be a trite example, but consider studies of playground learning; ‘climate’ matters: in most summers it differs from that of most winters – be that because of geographical and other contextual factors such as whether you are in some part of Canada or Australia, at low or high altitude, in elementary or high school, part or not part of a particular social group, and so forth. Equally, there might also be important questions to ask of the grounds established for being able to share, conceptually and linguistically, the accounts and constructions of the knowledge of education offered, if not legitimate criticisms and uses to which such research is subjected or put.

Similarly, we might speculate as to why traditions of thinking about conventions and principles in research ethics so often seem to have been traduced to questions of anonymity and confidentiality in Anglo-American domains, or more recently, to considering the rights and responsibilities of researchers to the researched, research community and stakeholders in guidelines or codes of ethics (as in the American Educational Research Association’s guidance). In our view, there are other questions and movements that can be productively pursued here, if we adopt a critical historical perspective. This is because, as noted quite vocally in post-colonial contexts, in some quarters there is resistance to research, or research is co-opted. Contemporary instantiations of participatory research, student voice research, and so forth, might enable us to see the issues from different angles and standpoints, if not to show pursuit of a ‘correct method’ largely extinguishes attention to many ethical issues, despite protestations otherwise. This speaks to us again of matters of contextualisation, legitimation and representation of ‘research ethics’ – indeed, of recognising and interrogating the voices, positions and frames that have become dominant, powerful and compelling in ‘researching education ethically’.

Taken these aspects together then, we invite the reader to consider the constellations and layerings of conceptualisation, characterisation, contextualisation, legitimation and representation in and across educational inquiry. This ‘turning aside’ from a more prototypical preoccupation with methodology was prompted because we do not accept that research practitioners are fundamentally privileged to provide an account of the field, but often act as if they are by focusing their accounts on method. Rather than try to eliminate privilege though, perhaps we might first gain greater purchase and traction in comprehending the multifaceted aspects of education through inquiry, by illuminating some of the connective tissue of all manner of inquiries through these five lenses? Thus, considering how we both approach and understand the importance, fullness, variety and pace of experiences, practices, concepts and claims of researching education – including the ambitions and attentions researchers put their minds to in prosecuting their inquiries – can return us swiftly to the ongoing matter of frames.

Framing the Text

Any account of research in education, including this one, has limitations as well as strengths. Just as surveys always evidence a selection (in that because of the action of sampling, they are never exhaustive of phenomena), so too must we acknowledge *and show* that alternatives are possible in the *Companion*. Responses and critical commentaries to each chapter were deliberately commissioned and are presented to offer some ‘writing back’ on the lead contributions. Read together, these may help us further wrestle with aspects of the coercive, hegemonic, quotidian, normative, and ipsative, in our accounts of, and lenses for, researching education. Similarly, while the treatments of the themes in each part are distinctive in the various subsections and transactions between authors, the deliberate inclusion of a range of response formats is to signal, however modestly, that we do not suggest a matter is settled or

staid, but rather, some further light can be cast on the content, practice and challenges that the theme or topic presents.

This practising of reflexivity in our ‘table of contents’ then is largely to show how researchers of education can generate, modify and criticise their own arguments, whilst engaging and remaining open to ideas and discourses external to it. For example, in the last chapter of the final part of the *Companion*, John Willinsky explores a perceived openness within current educational research, flowing from the ‘open access movement’. Well aware of debates concerning the scientific nature of scholarship, authors of chapters and commentaries on issues of representing educational research struggle with researcher responsibility within this openness. Moreover, as fields of social science and educational inquiry continue to expand, these issues remain far from resolved across diverse research genres where quality is differentially defined. So it seems crucial that amongst major issues of conceptualisation, characterisation, contextualisation and legitimation, perennial questions of knowledge construction and, ultimately, educational praxis are underscored, and that issues of representation maintain a firm place within the *Companion*. However, questions remain, particularly on what seems important in times of ‘paradigm proliferation’. Perhaps it is not so much what the changes are but how we think and talk about them?

The purpose of the final part of the *Companion* can therefore be understood as about creating conditions for thinking about the (im)possibilities of mimesis, that is, how we think we can represent the world(s?) of education in words and actions. Within the social sciences, where faithfulness in representation is perhaps not as straightforward as some would like, the route now seems to be much more philosophical than scientific, and hence a politics of inquiry has evolved around talk of methodologies and methods. Researchers increasingly look beyond assumptions of a unitary epistemology to inquiry and learn how to find their ground within a complex of highly contested onto-epistemic positions. Representation becomes a crucial issue where educational research involves bridging or respecting incompatibilities of world and words/actions through interpretation. Contributors to this part of the *Companion* discuss their struggles to become more conscious and reflexive in addressing concerns of representing people and their lives across genres that interact in complex ways within theoretical perspectives.

John Schostak, for example, illustrates several historically based concerns about who has the right to represent others in educational research. His chapter creates space for discussion of methodological diversity that, in response, Georgina Stewart wants expanded further into the identity politics implicated in issues of social justice from critical, indigenous, feminist and poststructural frames. In other words, Stewart asks for ‘more please’, – via a deeper grounding of representational issues within complex ethico-political spaces. And if these spaces and places for educational research are ‘inscribed’, as Roth’s chapter proposes, then issues of scale concerning levels of abstraction might become more conscious to education researchers who are working to become more articulate about how they make strategic choices. What is key here, it seems, is awareness of both cultural and various forms of media discourse so that their representations of associated phenomena such as emotion and voice remain credible. Such sensitivities and unsurprisingly, choices, become crucial in the world of visual representation as Pozzer-Ardenghi’s vignette reminds, where the subjective nature and aesthetic impact of representations are manifestly obvious.

Several contributions to our final part also work to extend these arguments for voice, emotion and aesthetics within forms of educational inquiry, as deeper tests for the onto-epistemic groundings of forms of arts-based performative text in researching education. Kathy Nolan’s study of preservice teachers’ images of mathematics and science portrays participants’ voices as aesthetic-emotional images that gain credibility through participant involvement in representations of their experiences that are sometimes uncomfortable as well as disruptive. Wanda Hurren’s response further disrupts readers’ assumptions of standard text form by combining place-based text with personal experience of place. She attempts to

represent the ‘word in the world’ in wilful contradiction of both the fixed nature of place and identity. She personifies place through levels of abstraction beyond simple interpretation. Nolan’s and Hurren’s contributions are also suggestive of ways in which various other ‘turns’ – corporeal, material, temporal and spatial – may be implicated in the philosophical and theoretical construction of perspective (as artform) that challenge orthodoxies of representation within the researching of education.

Creative thinking in the onto-epistemic ground of research representation is also evident in Leggo and Sameshima’s openly active argument for the use of fictional writing in narrative identity work. Their intent is to change their own voice to that of storyteller in order to change the way their research participants are represented, that is, as actors in a research narrative (rather than have one codified, objectivised, and fragmented) – and (how all) this makes for a political statement. Thus in trying to create spaces for ‘artful ways of knowing’, their work is consistent with Stewart, Nolan and Hurren’s search for critical onto-epistemic discussion spaces that remain sensitive to the conceptual, characterful, contextual and justificatory processes implicit to a necessary politics of representation. As boundary work that attempts to move the history of the fields of education inquiry, these authors are amongst the next generation of scholars that will decide ‘what counts’, as both commentators testify. In fact, Guiney Yallop and then Wiebe explore writing as research, using fictionalised narratives generated by themselves and others as ‘participants’ as ways of capturing complex experiences in storied and poetic images to present their own challenges of representation.

We draw our Introduction to a close by briefly considering the final set of chapters in the *Companion*, which attempt to perform and challenge (re)presentation across the ‘digital divide’. Lisa Korteweg engages the changing dynamics of educational research within the spaces of social media, in that these make users into producers of educational research, reducing the ‘double(d) hermeneutic’ with a revised form of participatory inquiry. Her work represents a worldview that questions notions of the academic within the public sphere. It asks serious and new ethical questions about the democracies and unfinishedness of digital participation/representation as necessary issues of quality in educational research that cross traditional frontiers. M. J. Barrett’s frontal assault on the inertia of the research regulations at her conferring university raises similar questions about how researchers learn to go about seeking better justification for developing and maintaining a particular, if not alternative, perspective. The ‘game of representation’ is obviously one of deepening scholarship and of challenging foundational thinking. Rapoport’s use of open access software, Barrett’s poetic hypertext, Korteweg’s digital or web-based generation and the critical narrative work of several other authors, consciously seek to disrupt linear readings of their work, in order to construct a particular presentation of self in the taken-for-granted assumptions about people-world connections expressed as ‘educational research’.

Willinsky’s optimistic notions of a new openness within educational research, then, seems to foreshadow changes in thinking about representing the researching of education as represented in the experiences of many authors in this part, if not elsewhere. Each contribution serves to remind readers about the challenges of being responsible within (and occasionally perhaps, beyond) those horizons that claim a new openness in scholarly inquiry. The part’s authors, in their own ways, view inquiry (framed onto-epistemically) as multiple, yielding differences that yield differences in ways of ‘prosecuting’ and ‘representing’ educational research. Each retains a certain pragmatic response to critique in creative acts of reflexive self-examination at all stages of the inquiry process. While onto-epistemic difference, rather than the search for commonality, is the message, acknowledging obvious problems of representational adequacy is crucial to serious scholarship. Coming to representation issues with a fuller consciousness of ‘it depends’-type issues embedded within layers of subjective consciousness, these researchers of education are left to construct meaningful and useful accounts of their work within diverse knowledge cultures.

Understandably, the authors in the concluding part of the *Companion* are acutely sensitive to the power inherent in the production of knowledges about others. So too are many of the contributors to the preceding parts. Researchers of education hold privileged positions by reasoning and deciding what are the important questions, and in directing the methodological process, the interpretive acts and the flows of discourse. Thus in contributing to the *Companion*, these authors recognise questions of authority, communication and representation as onto-epistemic, and thus inherently political too – they want to work towards a critical politics of knowledge generation. Many in educational research are looking for strategies of methodological engagement and representation that work to shift and displace interpretive authority through the proliferation of knowledges, well grounded within the serious work of scholarship. As Gillian Rose (1997) once said, we cannot know everything, but by acknowledging our uncertainties, perhaps we can do something more modest, and real. We can inscribe in our educational research practices and representations some elements of critical reflexivity that acknowledge our struggle to understand what it means to know, teach and learn.

Finally, it remains that an editorial partnership remains as much ‘an act of courage’ as compromise. The three of us came to this project with diverse passions, histories, priorities and experiences in engaging and explaining the researching of education. Collaborating on this project has deepened our vision of what is deemed sufficient as well as what can be signified when we encounter and evaluate educational inquiries. We hope the *Companion* might afford something similar for its readers.

Alan D. Reid
E. Paul Hart
Michael A. Peters

Reference

Rose G (1997) Situating knowledges: positionality, reflexivities and other tactics. *Prog Hum Geogr* 21(3):305–320

Part I

Conceptualising Research in Education

Conceptualising Research in Education: Challenging Concepts and Conceptions

1

Alan D. Reid

Abstract

This chapter introduces the contributions to the *Companion* that focus on aspects of conceptualising research in education. As a whole, lead chapters and response pieces illustrate the ways in which concepts and conceptions can be challenged by raising questions about how particular thematics have come to dominate conventional framings and understandings of researching education. Contributions explore such topics as the merits of the view that ‘research in education’ must somehow remain distinct from ‘educational research’, and how this might be challenged through reference to arguments that promote a framing of ‘research through education’, and ‘research as education’. The introduction also draws on wider links to other themes in the *Companion*, namely, why this might matter to how we characterise, contextualise, legitimate and represent research in education, particularly if ‘research’ were to be conceptualised as obtaining through ‘education’, rather than the reverse.

Keywords

Inquiry • Traditions of education research • Research paradigms • Discipline • Research as education

In this introductory chapter, we consider the broad features of contributions to this Part of the *Companion*, on conceptualising research in education. As a whole, the Part focuses on some of the concepts or ideas that might be entertained, privileged and disputed about researching education, the ways in which research in education might be fundamentally categorised, and the thinking and research imaginations associated with perceiving or regarding educational research in some ways rather than others.

Taken together, the chapters and response pieces serve to challenge various familiar and unfamiliar concepts and

conceptions of research in education, offering arguments and reflections about how research in education has been, and might be, variously understood. For the purposes of this *Companion*, these challenges focus on core debates about the adequacies of a wide range of traditions, paradigms, designs, practices, truths and ‘lived experiences’ associated with working in this field. In effect, they centre on how we respond to the following types of question:

- Which concepts and conceptions have come to dominate conventional and particular understandings of research in education, and why?
- What flows from maintaining the view that ‘research in education’ is distinct from ‘educational research’, and might we think otherwise here? And,
- Why might it matter to how we characterise, contextualise, legitimate and represent research in education, if we understand educational research as inquiries that also seek to qualify as self-education?

A.D. Reid (✉)
Faculty of Education, Monash University, VIC 3800, Australia
e-mail: alan.reid@monash.edu

Challenging Conventional Understandings of Research in Education

When we consider the range of library resources, teaching materials and instructional experiences available for introducing us to the principles and practice of education research, we do well to step back and ask which aspects have become key to evaluating a particular study as an instance of education research, if not ‘keys’ to wider debate? For Hanan Alexander, it is never simply a matter of asking about the quality of methods, let alone their assurance. Rather, as he shows in the *Companion*’s opening contribution, we might better consider those concepts and conceptions that serve to constitute and contest the ‘paradigms’ and other such ‘frameworks’ for educational research.

Alexander’s chapter offers a lengthy riposte to accounts of the ‘traditions of inquiry’ that tend to focus researchers’ attention on methods and methodology. Taking a principled stand ‘against methodolatry’ (a theme we return to in the second Part of the *Companion*), he offers a masterful engagement with the challenges of conceiving education research largely in terms of competing methodological paradigms. He illustrates the shortcomings of this approach by exploring how such perspectives have been put to work in particular and constrained ways, unpicking examples from the various ‘dispatches’ and ‘factions’ involved in methodological ‘skirmishes and wars’. In asking which concepts and conceptions are essentially abstractions from the realities of practicing research in education, Alexander invites us to recognise that there are narrow and broad ways of conceiving (and relatedly, historicizing) research in education, particularly when we talk of science and inquiry. However, discourse on these matters risks becoming increasingly unreflexive as the ‘frontline’ of debate, let alone ‘research training’ and ‘professional development’. In considering its conditions, parameters and limits, we must pay close attention to the vocabulary and grammar of our argumentation, as these resource and mobilise our concepts and conceptions, particularly if we want to advance the conversation.

Continuing with this particular discursive frame though, risks perpetuating a troublesome blind spot in scholarship about educational research. Researched knowledge is routinely driven by, made from, and tested against, *experience*; put plainly, the experience(s) of the sponsors, producers, participants and users of the research. In various ways, it is these ‘folk’ who variously negotiate, settle and dispute a research question and the purview for the research, and why, if at all, it might or should count as an educational inquiry. It is never simply a question of construct validity, content validity or ecological validity. What is at stake for Alexander, is an understanding of education research that isn’t mired by the discursive distortions of activities that

have come to dominate much contemporary thought and activity in relation to educational research, such as that associated with ‘making a bid’. The terms of reference that govern much of this activity have focused researchers’ and readers’ attention primarily on the whats, whys, whens, wheres, hows, and whos of a study. Arguably, these are better raised primarily in relation to the research *design*, and in recognising this, we might clear a space once more to ask why the research is important for education, and on what grounds it can be shown to be ‘educational’ research.

For Alexander, a concern here is that in either emphasising or deconstructing concepts and conceptions of reliability, validity and generalisability, or their alternatives, we seldom achieve much more than a reiteration or retrenching of the terms and logics of empiricism. As Alexander ponders, if one wishes to transcend this, there must be another way out of this particular bind for researchers of education. The approach he recommends is one that serves to uncover a key question about the coherence of the ideas and insights sought in research, with the means and ends of producing and adjudicating them *in* and *as* educational research, because, it is hoped, what is afoot is primarily an exercise in, and evidence of, excellent scholarship.

Alexander also detects a crack for further light to creep in to the (at times, restrained) contemporary discourse about research ‘justifications’, by first tracing and then re-tracing how ‘Anglo-American’ models for thinking about quantitative and qualitative approaches to research have come to dwarf alternative accounts of studying human ‘nature and conduct’ in educational settings. The particular intellectual burdens and clashes associated with ‘qual vs. quant’ discourses seem to have had the cumulative effect of focusing our debates (once more) on methodological sensibilities and positionings, such that they also tend to eclipse associated questions of epistemological purpose, fecundity and coherence – and to this, we might add, similar questions of the ontological.

However, by drawing on Michael Oakeshott’s work, Alexander suggests we shouldn’t seek to address such a crack solely by pursuing reframings of what is at stake. Rather it appears the crack can be widened further first, when we contemplate questions of the priority and substance of research judgement and its formation in and as ‘educational research’. An adequate response necessarily moves us away from matters of reliability and validity alone, towards a broaden reconception of the ethical, political and aesthetic dimensions of a project or programme of educational research – most notably in terms of how it is rooted, what it entails, and what might flow from it *for*, and possibly *as*, ‘education’ (we return to this point later). The particular dimensions highlighted here also seem to matter in the ways they help push accounts of research design away from a concept of methodology indexed primarily to technical features (usually,

establishing the merits or shortcomings of the logic of method chosen for a study) towards those of what counts (again?) as the significance of the research for education: from concept to execution, if not more usually in academia these days, in relation to claims of ‘impetus’ to ‘impact’.

Such a possible reworking of the terms of debate necessarily broaches issues of how explanatory rigour is actualised in a multi-disciplinary and interdisciplinary field, and the challenges of acknowledging the possibilities of ‘fallacy and limit’ in research for the field, be that understood primarily in terms of the methodological, epistemological or/and ontological. In other words, Alexander invites researchers of education to share and examine the warrants and grounds for any claims to equivalence and legitimacy of diverse theories and understanding of knowledge and knowing through education research, including how they relate to technical and practical knowledge interests as objects and outcomes of educational inquiry. It is here that he most heavily emphasises the value of what he sees as a possibly productive shift in dominant concept, to that of conceiving of educational research as more an ‘art’ than a ‘science’. This is because questions of the truth, conduct and connoisseurship of inquiry beg ethical, political and aesthetic considerations and reflections in the decisions made by researchers. These are already well serviced by arts-focused scholarship and deliberations, such as in questions on the qualities of participation and engagement, the limits of perception, and the challenges of legitimating and representing the very stuff of ‘phenomena’. A focus then on ‘the art and craft’ of educational research might also further open up queries as to why research might be characterised and contextualised in some ways rather than others *with* others, and as such, always already appears to suggest some purposefulness and intentionality, within or against a ‘tradition’ in an(y) account of educational research. Indeed, in his conclusion, he argues:

Educational research worthy of the name can only be properly conducted within the context of explicit and adequately defined visions of the good in which non-dogmatic norms, values, and ideals are articulated to govern policies, practices, and pedagogies. . . . to understand what counts as more or less meritorious, one must first possess a concept of what it means for an activity to be worthwhile, which is precisely the job of an adequately defended vision of the good.

Richard Pring’s response roundly commends the terms and goals of Alexander’s urgings, in both analysing and attempting to redirect the focus and choice of what we come to conceive and represent as ‘truly’ ‘educational’ ‘research’. To grasp why the scare quotes are necessary here, as in when we train our attention on what it means to research something *fully*, we can note that Pring elaborates how simplifications and reductions of research accounts to a language of rival and irreconcilable paradigms will often fly

in the face of broader philosophical reflections about the scope of education and its possible research – particularly, if not somewhat counter-intuitively, in relation to its likelihood and limits.

‘Educational research’ driven by interests that seems to put practical matters first, and theoretical second – to reverse the proverbial ‘cart before the horse’ detected here – may also risk another blind spot: of those essential questions in education such as, “What must we do to educate the young?” and “How should we organise the provision of education?” These, it seems, are routinely silenced (perhaps by default, but also by design) in some research accounts, as when we witness the heavy-handed trumping of ‘Theory’ or accede all queries to that which is in the ‘evidence base’, and what that might suggest or tell on the matter at hand. If nothing, should we simply decide a research claim is not ‘theoretically-rich’ or ‘evidence-based’, request further research, or ponder whether it is actually researchable this way, or that?

Revisiting these concerns and their complexities, including their origins and their/our ‘answers’ to them, we see that philosophical, historical, and ethical perspectives (in addition to aspects of previous, contemporary and future orientations about researching education) are typically implicit in their raising, even as we might also recognise that responses demand more than empirical or theoretical discourses to address key questions of education. In other words, we must recognise that the meanings ascribed to any data or theory, as well as the contestation of their meanings will inevitably draw from iteratively constructed, cultured and enculturated conversations about educational matters.

That we can recognise studies of education may contribute to both silences and conversations in logically distinctive and different ways to other forms and features of ‘the research conversation’, is to invite another question: of what is distinctive and shared about our conceptions and concepts of researching education, and educational research, across the sciences, humanities and arts. At the heart of this is the simple matter of recognising that it is not research that sustains education, but education that sustains research, in whatever field of inquiry. Put differently, we are still learning about research, and how to research, and will always (need to) do so. For Pring then, before proceeding to addressing what is distinctive, a resemblance, or shared, we might consider framing this somewhat differently: why not reconsider which educational questions stand behind our research questions, particularly when the game in question seems to be about the making and testing of claims to know about education? A secondary challenge soon follows: what must any meaning or claims making look like from ‘outside’? But again, before rushing into this framing, perhaps we could reframe that too. Consider what this might mean if we are to play with or take seriously, the notion of being ‘outward looking’: that is, not just considering how the

research makes sense on one's own terms or to one's 'community' or 'community of practice' (conceptually, politically, contextually, provisionally, etc.), but what it is that makes it recognisable to others in and across the fields of education research, if not as 'education research', and 'educational research' to the interested reader and researcher from 'elsewhere'.

"No Discipline Knows More than All Disciplines." (Francois Taddai)

David Bridges' contribution to this Part of the *Companion* builds on these challenges, as much as it also presents a way of reworking them. He distinguishes between *discipline* as a general requirement of any research inquiry, and *a discipline* as illustrative of an organised form of knowledge that structures and governs inquiries amongst a community of researchers. Notions of a field both *of* and *for* educational research inevitably marshal a complex range of questions about disciplines, populating and repopulating what counts as research questions, methods and methodologies, if not also constraining the diversity of forms of legitimation and representation, and the theoretical and interpretative frameworks and contexts used in or for education research. Given all this, it appears we must recognise – and interrogate? – why within all this, some 'ologies' or 'isms' are (and/or remain) regarded as 'foundational' to education, as with sociological, anthropological, psychological, philosophical and historical understandings of education.

Even though we see some hankering after a post-foundational, transdisciplinary or intersectional construction, as Bridges shows, the vitality of educational inquiry is dampened considerably by ceding questions of what to conceive and characterise as educational research to, on the one hand, a discipline specific (i.e. 'siloesd') way of thinking, and on the other, making it subject to 'outsider' agendas, many of which are increasingly experienced through the lens of the 'interdisciplinary'. Yet there remains the view that only through (self)discipline and *a* discipline may we learn to be free in our thoughts and actions as researchers. Otherwise, the charge goes, there is always the prospect of uncertainty, if not power plays, over which disciplines are to apply when, and which to eschew, in researching education. Post- or transdisciplinary sensibilities can prove tempting but may be ultimately unhelpful here, as when they fail to address the ways in which education research as a realm for scholarly endeavour remains at its heart, a rule-governed activity, and as such, necessarily closes down as much as opens up worthwhile avenues for 'educational inquiry'.

For example, a critical reading of the literature to prepare and pursue an educational research question remains both a disciplinary and disciplined undertaking. It is undertaken with particular literature in particular ways in order to understand what constitutes a productive research programme for a research topic on educational matters, such that its furtherance will, however directly or tangentially, advance the discipline and disciplines of education, and we would hope, its research. Reading doesn't stop at the proposal stage, it continues with a range of intensities and foci as the research unfolds, and we might pay particular attention to its role in the forming of conclusions about the significance of the study. For Bridges, demonstrating the various whats and whys, be those theoretically, empirically and/or pragmatically to the satisfaction of others, is just as important as demonstrating those features to the mind of the researcher seeking approval of and commitment to their work throughout its various phases. But as Bridges also notes, in constituting and demonstrating that the study is a legitimate example of education research, that doesn't necessitate deferring to accounts of disciplinary or transdisciplinary priorities either.

Given Bridges' association with the development and critical appreciation of educational action research alongside his work in using philosophy and philosophy of education in research, perhaps it is little surprise that he expects educational research to be marked by the qualities of sustained, systematic, careful and thorough forms of inquiry made public, not least because it requires a shared and critical, disciplined and scholarly discourse. We must, it appears, continue to work through the intellectual criteria that really matter to understanding the ways in which this or that study can be characterised as a worthwhile intelligent and intelligible task, illustrative in its prosecution as an achievement of 'educational research'.

Summoning a relationally-focused framework (as offered in this case, by historian, Lynn Hunt), Bridges reminds us that an 'epistemic community' of education researchers is indispensable as much as it necessitates the existence and continuation of a spirited community of 'arguers, enquirers and critics'. Somewhat inevitably, the community must evolve as the disciplines evolve, particularly given that the community's conditions of possibility and primary outlets are within the knowledge-power systems and dynamics of academia. Thus, for Bridges, novice to seasoned researchers can't escape the requirement of continually engaging 'the discipline of discipline', even as they collectively and individually attempt to consolidate or/and refashion the structures of power that govern the conception and practice of their research field and endeavours. And all this, it would appear, amid and across an apparent and growing diversity of research designs and priorities!

Agoraphobia in the Agora?

Peter Roberts responds to Bridges' chapter by exploring whether a renewed focus on the discipline and disciplines of research squares with the experience and structures of contemporary academic lives and livelihoods. Roberts draws his illustrations from 'scholarly settings' in New Zealand to consider the impetus for and constraints on maintaining disciplined enquiry, particularly following the rise of neoliberal policies in governing academic research about education. Roberts notes a twist here: the 'unit of analysis' is increasingly that of the researcher and her outputs, rather than something associated with that which is claimed to be better known and understood because of good educational research. He concludes that addressing the loss of respect for the place of critique in higher education is a serious matter in the education of the next generation of education researchers and scholars, particularly when we consider what is formed and valued for its own sake in research communities. Roberts notes, albeit wryly, that these too must be considered to be inseparable from matters of institutional forms and histories, power structures and priorities for educational research. Policy-driven disruptions to those, from both within and without, are seen to reconstruct as much as they restructure the 'preferred' values, sensibilities, relations and orientations that characterise the field's 'epistemic communities'. Hence what it is possible to conceive as educational research is never a question of 'mind over matter' but one heavily embedded in the realities of sharing and reworking the lived experiences of those participating in developing and contesting educational research.

For Hugh Lauder, in responding to both Bridges and Roberts, all this serves to suggest that something else is really at stake: how theory generation and appraisal are supported and developed in researching education, be that in disciplined or post-disciplinary ways. If the way we conceive of the purpose and acts of researching education is to encourage and engage critical questions about the robustness and persistence of particular theories about education (including the resources and impetus for their development and contestation), then the social contexts and political interests that fuel and constrain the explanatory breadth and depth of our best theories must be regularly examined too, especially, but not only, in the 'epistemic communities' of the academy. Riffing on Quine's axioms, Lauder explores the implications of the claim that 'our theories are always underdetermined by the evidence'. In fact for Lauder, it is crucial that education researchers do, and show, their homework; for example, in ways that clarify how 'nascent theories' have become 'well formed' about education phenomena, whilst in so doing, researchers can show others they

are able to commit to maintaining a culture of relations and resources for theoretical and empirical critique. Thus an epistemic community might look more like a place for allowing further and free(r) deliberation, unshackled for example, from ideologically- or 'evidentially' driven biases? And as before, all this, of course, amid the debris of many persistent and occasionally abandoned proto-theories, if not theories that no longer have the explanatory power and traction expected of them on the reality they are supposed offer knowledge about . . .

Why is this important for how we conceive of educational research? If we aren't to misrecognise our priorities, tasks, resources and ourselves, says Lauder, we should always closely consider what appears in our writing and writing practices, i.e. the principal mode for communicating our studies. These should ensure that the development and debate of our research bears witness to its role as a key site for advancing and demonstrating 'reflexivity' about theory generation and appraisal. This is because theories are constitutive of researched knowledge, as much as researched knowledge is constitutive of theory. Recognising this dialectical relation both in text and in our epistemic communities requires the discipline of publicly tracing how theories were 'seeded and nurtured', 'feed' and possibly 'weeded', as together researchers and readers carefully examine accounts of what becomes received and accepted, and argued and critiqued, within and across disciplinary contexts and boundaries for educational research questions and practices. On this view, understanding why knowledge is reliable or not still has its place, but so too does its relational aspects – how various people understand it (or not), and developed it (or not). In other words, for Lauder, appreciating which theories researchers of education have both invested in and struggled over within their communities (if not their careers and networks), is another crucial site for reflexivity.

'Data are always theory impregnated', and from this point Lauder argues that unless an active empirical research programme is maintained, there is the distinct threat that 'Theory' becomes overly abstracted (even fossilized?) in relation to the empirical realm; in other words, an epistemic community risks having it treated as increasingly free-floating of the contextual, originary and developmental conditions that nurtured, sustain and constrain it. In fact, as phenomena and contexts for educational inquiry are reconstituted and reconfigured across time and space, understanding what this thing called 'education' now is (let alone, was, has, or might become), implies that a researcher is only ever able to add a 'comma in the discourse' as opposed to a 'full stop'. Thus the quality of theory, or better, *theorizing*, are important candidates for marking out 'the achievement' of educational research.

Quasimodo and Inquiry: As If, in the Style of, Research?

Shifting registers again, the *Companion*'s next chapter rehearses whether the key to distinguishing the key features of researching education and educational research is not what researchers have to say 'about' education 'to' practitioners, but rather establishing what makes such research *educational*. In this regard, Stefan Ramaekers' is concerned with the qualities and demonstration of *transformation* in relation to *educational research*. As he shows throughout his contribution, this is not to abandon a quest for truth or knowledge *per se* in researching education, but to offer a deeper (and perhaps fuller) acknowledgement of human involvement in understanding the world as we consider the 'pursuit of truth(s) in educational research'.

Carefully blending a range of meditations on social science with salient extracts from a classic science fiction story on the institutions and practice of 'education', Ramaekers doesn't want to overstate his point about the quest for transformative potential. In fact, in querying why focusing on 'what works' in education research doesn't always work, he shows this is because the relation to truth predicated in much of that research seriously imperils the recognition and status of the subjective investments of education researchers and practitioners in what is counted and performed as this or that instance or version of the 'transformational' within *educational* research. In other words, in that such a focus can fail to give attention to the features and struggles of living with or even transcending the 'human condition', both the stress and Ramaeker's concern here is firmly placed on the side of the possibility, as opposed to any guarantor, of the truth of educational research.

Also 'against methodolatry', Ramaekers takes the argument further by illustrating how becoming overly obsessed with research methodology as in effect, 'all the proof that is needed' of the quality of research, further risks another slide: into making the research 'researcher proof'. It is as if what works is about finding what is 'really real' in education without 'contamination' by human lives or interests. Robotic educational research, anyone? Surely that is a contradiction in terms?

Playing with this conundrum, his chapter returns to a dialogue in Isaac Asimov's *Profession*, to illustrate what it might (and might not) mean to be educated. Ramaekers uses this question to argue for a recognition and revitalisation of the power of creative thought in claiming to demonstrate *educational* research. Here, evidence of thinking is also evidence of engagement with subject matter and meaning making; while to demonstrate our 'nous' about whatever it is we are researching, researchers must show they are searching out, rather than shying away from, that which

affords a 'transformation of existence'. This is because through the practice of *educational research*, our estimates of 'the worth of existence' must surely be shaken.

A response by Stijn Mus applauds Ramaekers' contentions as prompting a more engaged investigation of the truth *within* educational research. Mus also holds that travelling this path requires the exercise of judgement (like Alexander and Pring), but here our concern must extend to other questions of the intelligibility of our research endeavours. Thus Mus elaborates on the themes of the preceding contributions by considering whether judgements themselves are able to illustrate the sense and extent of responsiveness and responsibility of researchers to the making of 'intelligible' educational research on the part of the writers and readers of associated texts. While in foreshadowing some of the themes of the third and fifth Parts of the *Companion* (on contextualisation and representation), Mus argues that many of our conceptions of research display unspoken limits, particularly if they are framed by concepts that privilege the objects of educational research as those that also 'betray' – as metaphor and form of resemblance – untested and untestable assumptions concerning an external, stable reality that is being researched. This is shown to be problematical because such understandings tend to erase the fact that research operates as a cultural event within a particular cultural context (if not flux, despite the apparent inertias within many of our concepts of education and research). Mus suggests that in Ramaekers' terms, this is doubly problematic, as a demanding reading of educational research is that which, to qualify as such, requires demonstration of transformation, not just its potential. The stakes, therefore, are higher still: an educational research that endows reality with particular meanings, is research that is reflective of the cultural agreements and challenges that demanded, and demands, its enactment.

Whether the design of such educational research can still remain largely a question of research design, or must be 'troubled' further by considering the 'designs for research', is playfully and insightfully addressed by Paul Smeyers. His chapter stresses that educational research inevitably engages the terrain of the philosophical because it is always shot through with concepts and social practice. Smeyers is quick to show the value of regarding research as a 'performative intervention', that is, interested and predisposed towards particular modes of explanation. And this, unsurprisingly, requires an account of research design that is never principally or solely linked to description of method.

Smeyers is keen to explore the implications of such initial provocations: quantitative approaches risk running into problems when the ends of research are ignored in the design by researchers, or perhaps when factors are invoked that may (cor)relate at a statistical level, but operate rather independently in the messiness of 'a fuller reality'. Brute

(i.e. unthinking) application of quantitative approaches to each and every research question won't do either; they risk amounting to an 'abbreviated' form of research thinking that serves to neglect various subtleties on the planes and transactions of human experience and interaction. Equally, qualitative approaches can demonstrate certain weaknesses too, particularly when researchers appear to pursue designs that will state the obvious, or undermine some of the holistic aspects of its presuppositions, as in expecting to have findings 'transferable' or 'transferred' without necessary qualifications for another context. A contradiction in design terms seems to be at work, such that we find Heraclitus' old saw must still have its teeth: "No man ever steps in the same river twice, for it's not the same river and he's not the same man."

In short, if educational researchers really are interested in 'how things are' within and across times, relations and places, then they need to be transparent about the conceptual framework and concepts that they use to make sense of the multitude of education-related phenomena they are presented with in the very particular moments associated with their claims- and meaning-making. Smeyers charges that this also necessitates we pay close attention to how these matters are communicated intersubjectively, including the limitations to communication (and thus legitimations and representations) that obtain given the aforementioned considerations.

To develop this further, Smeyers draws on a distinction made by David Polkinghorne about narrative research. He shows, in effect, that the 'analysis of education' is not equivalent to 'educational analysis'; the former is indexed to what counts as the research object, the latter the distinguishing features of 'the process and results' of the inquiry. The presence and significance of the researcher and practitioner differ in each case too, as do the expectation of being able to offer a description and/or multiple interpretations. Linking this to Peter Winch's interests in the philosophy and practice of empirical study, Smeyers then argues that key elements of conceptual inquiry must also mark educational research; otherwise, how do we know or demonstrate it is *educational* or *research*, let alone *educational research*? Assertion will not do; to establish a self-understanding of 'what makes sense for us' we also have to ensure we have done the work that affords intelligibility to and by others, and inevitably, that means we must always be able to 'qualify' our claims about education. And if recognising that, in some small way, a need to qualify and quantify claims in different ways to diverse audiences is what allows distinctions between qualitative and quantitative approaches to be maintained, surely we shouldn't halt there. There are other, and bigger, fish to fry. Principal among these are establishing and clarifying how we weight diverse forms of evidence and key arguments within and across conceptions and contexts, which again, returns us to the priority of

questions of researcher and reader judgement, intelligence, and the 'terrains of intelligibility'.

In short, be they causal explanations or intentional understandings and interpretations, adopting rigid or narrow schemas for judging the value and quality of research risks overshadowing the ethical sensibilities and practices of epistemic communities as these are lived out. As Smeyers concludes, researchers may demure from regarding themselves as the keepers of the truth 'of what is real for us' when another possibility and prospect is considered: of being regarded as a 'registrar of truth'. Researchers, of course, ask why and how and when and where, and so forth, over and over again. But they do so not for the sake of methodical or methodological rectitude, but to come to 'new possibilities for education'.

Andrew Stables responds by recognising various direct and subtle moves in this 'language game', in order to examine their implications for realist and relativist orientations in educational research, as well as its implications for policy and practice. Stables has a particular concern: unpicking Smeyers' assumption about causality, suggesting that this hasn't been problematised sufficiently in the argument advanced in the preceding chapter. Stables elaborates by sketching why it is that rationalist, empiricist, humanist and pragmatist traditions of philosophy differ in terms of the explanatory and instrumental power expected of education concepts and propositions. In brief, a cause is not a reason, but in everyday life, they are usually expected to be related in some way or other. Translated to academic contexts, research claims are supposed to emerge and be presented in way that afford both a critical and reflexive space for the development and testing of reasons and reasoning. So rather than being the deadhand of traditions of academia, we have a hallmark, knowledge that is robust philosophically – and socially?

Stables observes that while there can be no overarching criteria for adjudicating necessarily partial and inconsistent accounts of education research, new thinking is analogous to a move in a game, and we must also allow for the possibility that some particular forms of 'new thinking' may even lead to a modification of 'the game' itself. To advance what seems to amount to a rectification of terms, Stables initially draws on Ludwig Wittgenstein's remarks about the experience of being immersed in a language game, to consider why concepts cannot be understood 'independent of context'. He then extends this concern through reference to Jean-François Lyotard's comments on narratives and narrativity, to emphasise the significance of 'social bonds' and the 'fabric of relations' within which the claims of educational research are performed and adjudicated. In so doing, Stables challenges researchers of education to recognise the political as well as methodological challenges of claiming to have 'researched',

again, as part of what amounts to being within an epistemic community, but also to lay further claim to the significance of its 'argumentative' and 'critical' characteristics.

Thus for Stables, accounts of the explanatory power of any educational research do well to consider: *power for whom*, and *to do what?* Equally, the normative assumptions riddling educational research cannot go unacknowledged – questions are often more likely to be framed and driven by a 'how should' rather than 'how does' impulse. Indeed, without the possibility of assuming universal legitimation of educational categories, concerns, concepts or constructs, Stables seems to be warning that a wellspring of hubris may gush forth if researchers either uncritically or unreflexively assume their work and activities can "improve education or learning for all" (p. 80). His conclusion is effectively to suggest we need a holographic perspective on the arguments of Smeyers. Rather than pursue or presume normative concerns, "educational researchers would be well advised to return to a more open-minded commitment to finding things out irrespective of their assumptions" (p. 80). Indeed, "they might also acknowledge the rich potential of unexpected connection and the potential power of the as-yet untried inference" (p. 80).

In recognising and celebrating this complex and contingent set of conditions, Stables invites the reader to consider whether we should actually hypothesise that "schools are temporary social phenomena" and that "when different groups of people involved in different forms of life use terms such as 'education' or 'learning', they mean different things by them, and that not all of those things are desirable: it may be that even different groups within a single school differ on this" (p. 80). Whatever lines of thinking or critique that one is tempted to follow hereon in, Stables is actually emphatic that we continue to pose such questions, rather than dismiss them as say, obvious, fanciful or mistaken. If researchers are to contribute to the discourse about education, what is at stake, and what is to be maintained, are iterative and collegial processes of exploration and clarification. Marked as such, one's work as an educational researcher will benefit not only other researchers and educators, but also the democratic governments that need to demonstrate they "respect, and need to hear, the voices of the people whom they serve" (p. 81).

Educational Research as a Way of Life?

Can education be conceived as the 'new philosophy', as 'a science for all sciences', even 'the science of all sciences'? The substance and warrant for such notions, and the relative thinness and thickness of their conceptualisations, are discussed in our final contributions to this Part, by Mary Kalantzis and Bill Cope, with a response from Norm Friesen. In the meantime, the penultimate set of contributions to this Part comes from Maarten Simons and Jan Masschelein, with a response from their colleagues, Joris Vlieghe and Mathias Decuyper. Simons and

Masschelein focus on the existential and ethical dimensions of their attempts to research education, unpacking what this might mean as 'a way of life' – if indeed research, as both attitude and practice, is something that should be expected to be demonstrable in 'the life of the researcher'.

Clearly much research in education is conceived as being primarily about generating knowledge for others to use, be that in disinterested through to committed orientations to the research 'object', 'subject' or 'relation'. But if we are to dig into what it means to 'produce knowledge', surely it can't simply be a question of making and distributing 'objects of knowledge', or being subjected to them because of a particular relation, process or expectation, e.g. the teacher to learner (or reader) of 'education', for the edification of the latter by the former?

Simons and Masschelein invite us to shift frames once again, on how we conceive of research in education, in part to recall a Humboldtian concept of the general 'higher education' of students achieved by participation in university-level research. But also to a sense of 'more than this': to stress that a research attitude is one distinguished by one's attitudes towards truth, in that modern researchers working in universities are supposed to seek out times and places for reflexivity, to explore and demonstrate how we grasp and understand reality, including questions of its totality and levels of intelligibility. For Simons and Masschelein though, this is only ever part of the story. Its limits become self-evident to the extent that we find ourselves moving beyond approaching and practising "research as the process of knowledge production" and assuming "a scientific reflexivity that is guided by scientific method and inspired by a disinterested or objective research attitude" (p. 84).

Inspired by the latter work of Michel Foucault, Simons and Masschelein consider the 'ethical and existential conditions of the researcher' to be what is actually – and always – at stake, particularly given the reflex of its potential as the 'self-education' of the researcher. If educational researchers are to 'see and speak the truth', then why not perhaps, judge their work by whether they can say, and actually do say, "This truth I say to you, well, you see it in myself"? In prosaic terms, perhaps the proof we seek is more likely to be in the pudding than the recipe.

For those committed to educational research as knowledge-oriented, this can amount to a challenging, if not awkward, defamiliarising process, regarding the purposes and scope of researching education, particularly what it means to know, and what knowledge and knowing means, in and through educational research. Simons and Masschelein do not want to dismiss attention to the internal or external conditions for producing or judging our claims to know though. Rather they set out to draw attention to the traditions and institutions – and their configurations – that make such claims possible, likely or not, and/or a priority. And in so doing, like Ramaekers, Mus and Stables, they seem to suggest we might entertain sharper questions about

when and where educational research is transformative, – again for whom, but also increasingly, to what ends? The difference here is to query what it means to research education, by having ‘researcher as truth-teller’; that is, by considering the obligations associated with each aspect in terms of rationale and rationality, within and beyond the framing of becoming and being ‘academic’ or ‘scientific’.

Their ‘essay’ proceeds from this point by fusing questions of scholarly practices with demonstrations of those selfsame practices, weighing and testing the ideas to hand. Their approach gives full play to the very notion of their chosen form of writing, and it is in the middle third of their chapter that they provide both a subtle and supple exegesis of what it means to ‘care for the self’ as one particular exemplification of the immanent relation of the self to the self. In other words, the focus is on the work of the self upon the self and its influence on ‘the mode of being’ of the subject, which in this case, questions what is required in order to speak one’s truth as a ‘responsible researcher’.

Responding to their own call then, Simons and Masschelein cannot but consider why and how ‘mastery’ has become so important to such considerations for educational researchers. It seems competent research requires mastery of the field, and mastery of method. And artful research requires mastery of principles, and mastery of technique. But before over-elaborating this, we must ask: does mastery, and attention to mastery, become numerator and denominator not just of the aspects of the life in question, but also the whole of an educated life?

Simons and Masschelein advance that the criteria for recognising ‘the educated’, such as in focusing on the aspirations and challenges of ‘being just’ and living a ‘true life’, help prevent us getting lost in the clouds (or is it mist?) at this point. These qualities are not to be understood at the level of abstract knowledge, but in terms of someone’s behaviour and actions. The plane of existence on which we test our mastery then, remains public, and a ‘public education’ must allow for ‘free speech’. However, this particular notion of *parrhesia* needs some qualification. If it functions as a means for mediating presence, then a strong degree of correspondence between speech and action is rightly expected. Put differently, this is where relevance can be reconfigured as a notion that speaks to an attitude of intimacy with the matters in question, and to their criticality, for the self, the research and research community, if not to researched knowledge more generally. And with a quick side reference to some of Michael Peters’ work on such notions, Simons and Masschelein are able to suggest that a ‘parrhesiastical education’ is “critical truth-telling in the name of the care of the self and not in the name of valid knowledge” (p. 89).

So in entertaining a concept of research *as* educational, we might shift our attention towards matters of principle and process, particularly in terms of intimacy, familiarity and criticality, rather than remain with matters of output or

outcome (even if our notions of mastery remain somewhat confused with those for the very demonstration of expertise). Simons and Masschelein somewhat ironically observe that the arch view seems to be that “the researcher, as well as the expert, does not have to meet any ethical-existential conditions” (p. 89). But if this is so, the call to take care of the self is more likely to fall on cloth ears. Expertise, it is charged, becomes – or perhaps better, *remains* – primarily concerned with how we go about promoting knowledge-based emancipation. It is enlightening only to the extent that it illuminates a problem – usually somewhere out there – such that being critical is reflective of a judgemental stance that, for all intents and purposes, seems to be about whether some ‘other’ has (or hasn’t quite yet) ‘seen the light’. But more often than not, don’t we also suspect it is about a convergence, towards those very same lights that guide the researcher? If only practitioners could see it too – what they lack – *that* is what’s really at stake. While we might as well see an epistemic community as where researchers continue their machinations, quibbling over whose light is brightest, most penetrating, even (if we are not readily mistaken) who has the quintessentially purest of lights?!

Any suggestion of a descent into humour here is quickly betrayed by its underlying seriousness. Jostling to assert, let alone prove what is essential or most enlightening in research in education, as educational research, isn’t an end in itself, even if it may appear as such. Caring for the self – in fact, ‘staying curious’, maintain Simons and Masschelein, is the priority. It requires both a distancing from the present concern, and a vigilance: about which, whose and what ‘present’ is becoming ‘ever present’. Our attitude as educational researchers must be to wrestle with the notion of limit and limits on and in the present, to evince our commitment to the possibility of experiencing ‘experiment’ and ‘freedom’ as education, and educational. In other words, ‘transformation’ proves to be a stronger test once more of ‘real educational research work’, inspired as it is by a willingness to test the experience(s) of education. In short, it is about the prospect and experience of learning, relearning and perhaps even unlearning what ‘education’ does to us, what it might also mean to be ‘being educated’, and for something, or some other, to ‘become educational’.

Taking this on invites a profound disruption to many of the usual terms of reference for what it means to be an educational researcher: from appearing to want to produce, accumulate and transfer knowledge, towards living ‘a true life’ and being “a ‘touchstone’ for others to take care of the self and to live a true life oneself” (p. 92). Thus, for Simons and Masschelein, the educational researcher is not imagined or expected to be the person who assumes their role is to address others (e.g. colleagues, readers, students) as subjects of knowledge, or for that matter, sees their business as about judging their involvement in education matters (because these can always be better, or because they can choose better

actions). These, again, are evidence of an unobvious exercise in missing the proverbial point.

In its place, ignorance is not seen as a state to be ‘enlightened from’, by convincing argument and proof, even though much that passes as education research seems to be used for such purposes. Rather, we are invited to ‘have an experience’, and possibly, in learning from that, relate to ‘things’ differently, because of the discontinuities that have opened up during the practice of educational research: towards one’s knowledge, in one’s self, in ways of relating self to the self, and to others. Again, any ‘gesture’ or ‘gesturing’ here has to be demonstrated or contested ‘companionably’ on a public plane. It cannot be a private ‘convincing’ or ‘conversion’ in a way of seeing things because of some presentation of the ‘facts’. They write (p. 93):

Making things public . . . is about ‘matters of concern’ and their becoming public correlates with the constitution of a public, that is, people invited to share these concerns. . . . Making things public . . . is thus the result of existential-ethical work on the self that breaks open the common horizon of our self-understanding and taken for granted practices (that is, what ‘we’ regard as ‘matters of fact’), and hence transforms them into ‘matters of concern’.

This integration of the view of philosophy as a shared way of life, with research as involving a questioning and studying of ‘ourselves’, alongside education as inviting a self-transformation and extending that invitation to others, is an incredibly challenging concept, and conception, of researching education. What education researchers do, who they are in and outside universities, for example, is again seen as a critical matter of concern. While also perhaps (given the brief note to spirituality in the contribution from Simons and Masschelein), it becomes another question, of that which is our pearl ‘of great price’. In working through what it means to work and take care of the self through educational research, we must recognise its true value and cost. Ignoring these, as noted by the author of the *Companion*’s epigraph, in another poem (R.S. Thomas’ the *Bright Field*), might mean we fail to ‘turn aside’ when we perhaps could have: in this case away from some of our current preoccupations and obsessions in education research?

Joris Vlieghe and Mathias Decuypere prove they aren’t afraid to rise to such challenges. Their response illustrates what all this might look like, at the ‘Laboratory for Education and Society’ (University of Leuven). Documenting their attempts to develop and practice an ‘empirical philosophy’, they consider what it has meant to foster an ‘experimental attitude’, that is, “preparing students to respond adequately, and in their proper name, to the challenges and immediacies of the present” (p. 97).

In pursuing self-transformation in the here and now (as distinctly opposed to focusing on the past or the distant in researching education), they maintain that educational researchers can never stay indifferent, and hence, must ‘never remain the same’. The vulnerability they detect within one’s concepts and conceptions in researching education must be admitted, even as we pursue very public and very concrete research programmes. Vlieghe and Decuypere show the reader ways in which they no longer cling to ‘a priori established methodologies’ as they engage in an experimental attitude and approach to dealing with the present. This is because they draw from a broad repertoire of approaches, even as they always have to countenance the prospect that new and perhaps unexplored ways of doing research are necessary ‘to take this present seriously’. Once more, it is the ethos, if not the ethics, of our communities of research, that are brought into question in how we conceive (of) educational research. Neither can be ‘mastered’ or ‘engineered’ once and for all, but as educational researchers, we must learn how to live with both an openness and attentiveness to both the present and hereafter of educational research.

We can but ask, in closing this introduction, are these – more or less – challenging concepts and conceptions of research in education?

Note on Contributor

Alan Reid is an Associate Professor in the Faculty of Education, Monash University. He currently works as the Associate Dean (Education) in the Faculty, a role that requires careful consideration of the competing concepts and conceptualisations of education and research laying claim to contemporary educational practices.

Hanan A. Alexander

Abstract

In this chapter I examine debates over the relative merits of qualitative and quantitative research in education from the perspective of Michael Oakeshott's critique of rationalism in the study of human conduct. Contrary to the positivist view that causal explanation based on randomized experimentation is the highest standard of knowledge, I argue that when it comes to the study of human subjects, even statistical generalizations depend upon a prior form of qualitative understanding. The chapter concludes by considering some consequences of this perspective, which I call 'transcendental pragmatism,' for the practice of inquiry in education.

Keywords

Epistemology • Research methodology • Inquiry methods • Educational research paradigms • Transcendental Pragmatism

Introduction

The study of education as an independent academic field began in the late nineteenth and early twentieth centuries in an effort to base teaching, school administration, and the curriculum on empirical findings (Callahan 1964; Kliebard 2004; Tyack 1974). It was part of a wider movement that promoted applying the methods of natural science that had become so successful during the two previous centuries, to the study of mind and society. Auguste Comte, a nineteenth century French philosopher and one of the founders of sociology, termed this positivism to convey the belief that empirical science alone can verify positive statements about human beings and societies in addition to the natural world (Comte 1988). Teachers and administrators, who had previously been chosen on the basis of religious or political affiliations and who grounded their practice in theological traditions or political ideologies, could now be professionalized, according to supporters of this movement. They would undergo a rigorous training in the scientific principles of child development,

human learning, or organizational management, and the curriculum could be constructed on a solid statistical foundation. Educational research on this view is an applied branch of developmental and behavioral psychology and to a lesser extent organizational sociology with scientific experimentation as the ideal mode of inquiry (Egan 2004).

This perspective dominated educational research especially in the United States until the mid twentieth century when it came under attack on two fronts. The first was modeled after cultural anthropology and the humanities, especially literature and the arts (e.g. Clandinin and Connelly 2000; Eisner 1991; Rist 1977; Stake 1995) and the other was grounded in the radical social criticism of Karl Marx and his intellectual descendents (e.g. Harvey 1990; Kincheloe and McLaren 1994; Lucas 1972). Advocates of the former position rallied around qualitative methods and constructivist approaches to knowledge production, in contrast to the penchant of the positivists for statistical generalizations of quantitative relationships between objects or events given in the world (e.g. Guba 1978, 1990; Guba and Lincoln 1985, 1989; Patton 1990). Proponents of the latter orientation referred to their view as critical, since it aimed to critique hidden power relations in ideological institutions such as schools, in order to bring about a more equal or just

H.A. Alexander (✉)
International School, University of Haifa, Haifa, Israel
e-mail: hanana@edu.haifa.ac.il

distribution of resources in society (e.g. Freire 2005; McLaren 1994; Popkewitz 1984). To refer to these rival traditions of inquiry, opponents of positivism in education borrowed the term ‘research paradigm’ from Thomas Kuhn’s influential historical study of science, *The Structure of Scientific Revolutions* (Kuhn 1962). They also adapted some of his observations about the emergence of new paradigms in the physical sciences to justify what they saw as innovations in educational research (Alexander 2006, p. 209).

This picture depicts fairly accurately more than a century of Anglo-American thinking about research in education. It sidesteps, however, the acrimonious debate known since the mid 1980s as the “methodology wars” in which the positivists and their qualitative and radical critics sought to defeat one another. It appeared for a time during the 1990s that the two camps had reached an accommodation. However, when in 2001 the US Congress passed the No Child Left Behind legislation, which declared ‘randomized controlled experimentation’ to be the ‘gold standard of educational research’ and directed the US Department of Education to channel its research dollars almost exclusively to random field trials, the warring camps girded their loins for renewed combat. No doubt the primary catalyst for the renewal of hostilities can be found in No Child Left Behind’s aggressive pro-positivism and overt disapproval of much qualitative and critical inquiry.¹ But the truce was also fragile. It masked deep and ancient philosophical differences over the nature of knowledge and human conduct by embracing problematic assumptions. The advocates of accommodation tended to view positivism in education naively as the standard against which other traditions of educational research are to be judged. Constructivism was also conceived as a form of weak empiricism, but ignored the roots of qualitative inquiry in conceptions of knowledge that predate the rise of empiricism, a situation compounded by the embrace of hard and often incoherent forms of epistemological relativism as a path to coexistence between positivism and constructivism. In so doing, advocates of accommodation were charged with paying insufficient attention to the potentially devastating impact of critical social theory on the very possibility of uninterested knowledge altogether upon which to base educational practice or policy (Alexander 2006, pp. 208–212).

I have criticized these assumptions elsewhere under two separate headings: (1) ‘the two dogmas of educational

research’ and (2) ‘the dual (or multiple) epistemology thesis.’ The first heading refers to two common distinctions of contemporary educational thought, between the cognitive and affective domains on the one hand, and between facts and values or truth, beauty, and goodness on the other (Alexander 2003). The second relates to the idea that positivism and constructivism can be conceived as equally legitimate theories of knowledge (Alexander 2006). In this chapter I wish to elaborate on these objections by exploring their connection to Michael Oakeshott’s distinction between technical and practical knowledge and his critique of rationalism in the study of human conduct (Oakeshott 1962, 1975, 1989). Oakeshott’s view offers a useful conceptual framework within which to reformulate and expand upon my previous critiques and to clarify how we ought to think about the paradigms of educational research. Contrary to the positivist view that causal explanation based on randomized experimentation is the highest standard of knowledge, I will argue that when it comes to the study of human subjects, including educational research, even statistical generalizations depend upon a prior form of qualitative understanding. The chapter will conclude by considering some consequences of this perspective, which I have dubbed ‘transcendental pragmatism,’ for the practice of inquiry in education.

Two Concepts of Knowledge

Oakeshott divided human life into two interrelated sorts of experiences. On the one side lies our encounter with the natural world of things, objects, events and facts. These can be conceived technically in terms of unambiguous and mechanistic rules, universal laws, statistical generalizations, correlational relationships, and causal explanations. On the other side, there is the world of performances and occurrences, which have meanings that can be interpreted in a variety of different ways. Although people possess bodies and live in the natural world, what distinguishes them from the rest of nature is that they also inhabit a self-created historical world of diverse cultures. These are comprised of performances and occurrences. The former are activities that disclose beliefs about the sort of people we choose to be, how we prefer to live with others, or the meanings that we attribute to the world around us; the latter entail events and experiences that we interpret in light of those beliefs. The stories we tell our children about who they are and where they come from involve performances, for example, while occurrences can be seen in historical or natural events to which we attribute meaning or from which our lives derive purpose such as the birth of a nation or a child (Oakeshott 1989, p. 64).

Accordingly, we can distinguish between two sorts of knowledge: one *technical*, focused on things, objects, and

¹ The National Research Council of the American Academy of Science offered a broader account of ‘rigorous science.’ It recognized the academic respectability of a variety of methodologies in educational research that included such qualitative disciplines such as educational anthropology (Feuer et al. 2002). However, a number of critics point out that this view does not veer very far from the narrow empiricist path (Eisenhart 2005; Erickson and Guitierrez 2002; Moss 2005; St. Pierre 2002).

facts; the other *practical*, concerned with performances, occurrences, and meanings. Technical knowledge entails techniques required to properly engage in such human activities as natural science, the fine arts, or the governance of a good society. These can be formulated in propositions – rules, principles, directions, and maxims – that are found in manuals for cooking, driving, or scientific research. Practical knowledge, on the other hand, exists only in use, and is shared or becomes common not by means of formulated doctrines, but through traditions of practice. “Technical knowledge can be learned from a book,” wrote Oakeshott. “Much of it can be learned by heart, repeated by rote, and applied mechanically.” It can, in short, “be both taught and learned in the simplest meanings of these words.” Practical knowledge, on the other hand, “can be neither taught or learned, but only imparted and acquired. It exists only in practice, and the only way to acquire it is by apprenticeship to a master – not because a master can teach it (he cannot), but because it can be acquired only by continuous contact with one who is perpetually practicing it” (Oakeshott 1962, pp. 10–11).

Following this way of thinking, Oakeshott differentiated behavior from conduct. Behavior is associated with the world of techniques and objects, with conditioning and reactions to circumstances, with that which can be observed about what a person does disconnected from what she thinks or feels or intends. Conduct on the other hand, is situated in the world of practice and meaning. It relates to wants rather than needs, to active recollections not mere passive memories, to thinking and believing not just doing, to understanding and interpreting instead of only recording, to creating and innovating rather than simply imitating. Behavior in other words is mechanistic, bound either by natural or behavioral laws or by pre-established human rules. Conduct, on the other hand, is intelligent, subject to multiple interpretations and capable of generating new norms (Oakeshott 1975, pp. 40–41).²

Positivist research in education is an example of technical knowledge since it is grounded in inflexible rational rules and focused primarily on the object of observable human behavior. The ingredients of experimentation are intended to render a wholly mechanistic account of how things, facts, events, and behaviors are related to one another. Concepts such as valid and reliable measurement, treatment and

control groups, random selection, pre- and post-testing, dependent and independent variables are employed to induce universal laws or statistical generalizations from otherwise messy data, stating that predictable consequences are necessarily or probably caused by defined events under given conditions. According to the so-called deductive-nomological account, scientific explanations are deduced from such laws or generalizations when the expected results follow particular instances of those initial conditions as anticipated (Hempel 1966; Nagel 1961). Less rigorous research designs, such as quasi-experimentation (which contrasts treatment to unsystematic comparison rather than randomly selected control groups or non-experimentation which may forgo comparison groups altogether) can measure correlations between two events, i.e. how often they occur simultaneously – but not whether one is caused by another (Campbell and Stanley 1963; Shadish et al. 2002).

Qualitative inquiry, on the other hand, aims to illuminate practical knowledge of human conduct by rendering an understanding of the rich variety of performances, occurrences, and meanings – manners, styles, tastes, customs, symbols, and stories – that are embedded in diverse, historically contingent, cultural traditions. Various sources of data – participant-observation, in-depth interviews, material culture – are collected and compared with other sources – additional observations, interviews, or artifacts – for purposes of corroboration (e.g. triangulation) to construct coherent depictions of performances that occur in particular natural settings (Bodgan and Bilken 2006). These can then be interpreted according to one or more of several hermeneutic orientations, for example: *phenomenologically*, to give voice to the ways insiders experience the setting and the meanings they attribute to that experience; *ethnographically*, to offer an account of the social norms that govern the actors in that setting; or *aesthetically*, to assess the value of the events that transpired in that setting according to one or another standard of merit or to discover new meaning in them that might not have previously been conceived (Alexander 1987, 2003, pp. 2–6).

Critical social knowledge is more technical than practical in Oakeshott’s view (1962, p. 26), despite the emphasis of many critical theorists on debunking the theory-practice dichotomy in favor of a nexus they call praxis (e.g. Bourdieu 1990; Freire 2005; Lucas 1972).³ Like positivism, critical social theory from Marx (Marx and Engels 1998) through the Neo-Marxists (Horkheimer and Adorno 2007) to Foucault (1982, 2001) is grounded in rigid rules, albeit different ones. Positivist

² Oakeshott was not especially rigorous about the way he uses such terms as ‘behavior’, ‘conduct’, ‘skills’ or ‘abilities’. He sometimes referred to a tradition of practice, for example, as a tradition of behavior, when by the idea of practice he clearly had in mind meaningful conduct not merely observable or unintelligent actions. Similarly, he describes skills as abilities of lesser complexity, and often uses the term complex abilities to denote more sophisticated capacities. To simplify, I use the term ‘behavior’ to denote activities that are less, and ‘conduct’ endeavors that are more, meaningful or intelligent. Similarly, I use ‘skills’ to denote less and ‘abilities’ more, complex capacities (Alexander 2008).

³ Marx and Engels were among our most incorrigible political rationalists in Oakeshott’s view. In reference to dialectical materialism he wrote that, “no other technique has so imposed itself upon the world as if it were concrete knowledge; none has created so vast an intellectual proletariat, with nothing but its technique to lose” (Oakeshott 1962, p. 26).

reasoning is inductive and deductive while critical rationality is dialectical and power-related. Marxist philosopher Louis Althusser dubbed this the logic of the “conflictual sciences” (Althusser 1999, pp. 7–32) and hermeneutic philosopher Paul Ricoeur, the “hermeneutics of suspicion,” which, like Althusser, he also associated with Freud and the psychoanalytic tradition (Ricoeur 1970, 1974, 1981). The ingredients of critical social theory are designed to reveal hidden conflicts that are believed to arise necessarily – mechanistically – when power is distributed inequitably in a society. Concepts such as base structure (means of production, alienation of labor, political-economy, and socio-economic status); superstructure (false-consciousness, ideology, hegemony, power relations, and social interests); and post-structure (discourse analysis, deconstruction, post-colonialism, and post-modernism) are used to hasten the inevitable revolution that will redistribute resources with justice, if not sensitize us to the sundry ways we dominate one another in order to lessen but not alleviate the unrelenting grip that inherited power relations hold over us (Harvey 1990).

Although they are clearly distinct from one another, Oakeshott insisted, technical and practical sorts of knowledge are also inseparable. Many human activities such as the fine arts – painting, dancing, acting, poetry – require a high degree of technical knowledge. But this knowledge only acquires meaning in the context of concrete traditions of practice. What counts as great technique in one tradition may be scoffed at by another. The same can be said not only of crafts such as cooking and pottery-making but also of knowledge in the natural and social sciences. The techniques of psychoanalysis, to take but one example, have no meaning whatsoever when viewed from the perspective of experimental or behavioral psychology. To make sense its rules and maxims must be embedded in a tradition of psychological and therapeutic practice. What is true for art, craft, science, and therapy is true for education as well, which involves the attainment of self-understanding by learning to see oneself in the mirror of historically contingent and culturally embedded traditions of practice. Nowhere, writes Oakeshott, “can technical knowledge be separated from practical knowledge, and nowhere can they be considered identical with one another or able to take the place of one another” (Oakeshott 1962, p. 9).

The Pursuit of Knowledge and the Study of Education

In contrast to the idea that technical knowledge entails the standard against which other perspectives should be judged, the pursuit of knowledge on this view begins with acquiring an understanding of human conduct preserved in traditions of practice. This becomes apparent when we distinguish skills from abilities and information from judgment. Skills

relate to our capacity to do or make something by means of behaviors. As complexity increases, however, and greater degrees of mental activity are required, the term ‘skills’ is often replaced by ‘abilities’ which exhibit characteristics associated with human conduct. The movement from skills to abilities can be detected by noting the sorts of knowledge that each entails. To the extent that skills require knowledge, it will typically take the form of technical information – inert facts often accepted without question or a process of inquiry. Information is bound by rule-like propositions and discovered by the application of mechanistic formulas or techniques. Complex abilities, on the other hand, require partnering information with ‘judgment,’ the tacit ingredient of knowledge that cannot be specified in propositions.

Judgment cannot be itemized in the form of facts characteristic of information. It is concerned with the ‘*how*’ not the ‘*what*’ of knowledge – not in the sense of rules of inquiry (these can be conveyed as information), but in the sense that enables us to interpret that information: to decide upon its relevance, to recognize what rule to apply, and to discover what action to take where no rule is relevant. Judgment is not information of another sort then, but what has sometimes been called the ‘art of inquiry’ without which inquiry itself remains unintelligible. To be initiated into a mode of understanding such as history, philosophy, science, politics, or educational studies requires not merely that one has acquired the mechanistic skill to recite information or apply rules of inquiry, one must have also mastered the ability: that is, acquired the judgment necessary, to understand and explain that information and those rules, to grasp their meanings, and even to generate new ideas by using the relevant language in fresh and original ways (Oakeshott 1975, p. 54).

Learning to inquire involves becoming a connoisseur of good judgment and proper conduct, rather than a master of technical procedures and formulas. This requires an ability to comprehend and create meanings, not merely to recite facts or apply rules or principles. The one is accomplished implicitly, through apprenticeship to qualified mentors; the other by means of conditioning, training, and telling. It is in learning to appreciate the significance of information that the real substance of an inheritance lies, Oakeshott explained, to distinguish between the sorts of answers appropriate for different kinds of questions, to enjoy intellectual virtues such as curiosity, patience, honesty, exactness, industry, concentration and doubt, in short, the ability to think. This is not taught overtly by precept or through a separate subject-matter in the school time-table or a university course of study. The arts of thinking are imparted unobtrusively in everything that appears in the curriculum, in a tone of voice or a gesture which accompanies instruction, in asides and oblique utterances (Oakeshott 1975, p. 61), in short, in the ‘intricacies’ and ‘intimations’ of a tradition or culture (Oakeshott 1962, p. 129). Even though they are independent

and interdependent, therefore, the acquisition of technical knowledge presupposes prior practical knowledge which entails initiation into a tradition. Qualitative understanding is logically prior to causal explanation, not the other way around.

Becoming educated in this view entails initiation into a number of diverse conversations about how to understand and interpret the world in which we live, to appreciate a variety of literatures, not merely to speak the relevant languages, to master the subtle arts of argumentation from a several perspectives, not only one or another partisan theory among a narrow array of possibilities. Schools and universities are themselves historic communities with their own customs and ways of life, places set apart from the world for the purpose of enabling students to engage the ‘intimations of excellence’ that characterize these literatures, some of which may have never been encountered before, to promote satisfactions that might never have otherwise been imagined or wished for (Oakeshott 1989, p. 69). The study of education, in this view, cannot be reduced to the mere mechanics of instruction in inert facts and inflexible rules, or the outcomes of policies designed to improve student achievement, or reduce school violence, let alone produce some or other predetermined technical result. It requires an understanding of the cultural traditions in which these facts, rules, and policies are embedded, their values, aspirations, and conceptions of excellence. In short, qualitative understanding is no less a prerequisite for quantitative analysis in education than in other pursuits. Abstract rules cannot substitute for an appreciation of the hermeneutic subtleties embedded in the practices of teaching and learning. If there is a ‘gold standard’ to educational research, it is surely not to be found in “randomized controlled experimentation.”

Methodology Wars and Research Paradigms in Historical Perspective

How then did it come to pass that nearly the opposite of what appears to be the case is accepted as common wisdom in many circles of educational research? Oakeshott attributes this to what he calls the fallacy of rationalism in politics: the false idea that human affairs can be adequately captured by means of abstract and rigid concepts, rules, or techniques such as those taught in empirical science and critical theory, which include not only inductive, deductive, and dialectical forms of reasoning but also skeptical methods for deconstructing social structures, power relations, and regimes of meaning. ‘Rationalism’ in this view, asserts that practical knowledge is no knowledge at all; all knowledge is technical, the superiority of which lay in the appearance that it springs from ignorance and ends in certainty. But this is an

illusion. Technical knowledge is never self-complete; it relies on presuppositions grounded in practice, without which the techniques of a particular field of inquiry make no sense (Oakeshott 1962, pp. 11–12).

The problem with rationalism so conceived, Oakeshott contended, is that it confuses genuine knowledge of human affairs with half-truths torn from experience of the world that is normally recalled in the political traditions of a society. Worse, it attributes to those traditions, which are preeminently fluid, “the rigidity and fixity of character” that in fact belongs to the ideological principles born of arid technique (Oakeshott 1962, p. 31). This has two especially egregious consequences. First, it is incapable of addressing its own shortcomings, since the only body of knowledge capable of correcting its errors is rejected in advance. When one rationalist project fails it can only be replaced by another (p. 32). Second, a society which embraces rationalism of this kind will tend to prefer an exclusively technical form of education, grounded in the empiricism of Kant and Locke or the dialectical thinking of both left and right leaning Hegelians. ‘The Rationalist’ believes that “training in technical knowledge”, not “initiation into the moral and intellectual habits and achievements of his society”, is the only education worthwhile, “because he is moved by the faith that there is no knowledge, in the proper sense, other than technical knowledge” (p. 33).

The source of this fallacy, in Oakeshott’s view, lies in the preoccupation with certainty found in the seventeenth century epistemological writings of Frances Bacon (2002) and Rene Descartes (1999). The goal of such scientific inquiry requires a reduction to a set of ‘clear and apparent’ rules that are indifferent to subject-matter and that can be formulated as a precise set of directions (Oakeshott 1962, p. 15). It is no doubt the case that the privilege afforded positivist technique in the methodological debates in educational research can be traced back to these empiricist origins. However, as I intimated above, the methodology wars in education join a much older philosophical discussion about the very possibility of knowledge altogether in which the fixation on certainty and inflexible rules begins not with empiricism but with a more ancient form of transcendental rationalism.

Plato was among the first to question whether practical experience is a reliable source of knowledge. Instead, he argued, certainty could only be achieved by rationally abstracting essential forms from the material accidents of things experienced in practice. This resulted in the sort of rigid, monistic rationality characteristic of technical knowledge, although it should be noted Plato’s method was dialectical, not inductive or deductive, and involved a process of conceptualization and critique; while his findings were transcendental not empirical, abstracted from, not based on, experience (Plato 1987, 2002). Yet in the very attempt to address the monism and

rigidity of this approach, even as Aristotle also distinguished abstract theory from practical wisdom (like his teacher), theory remained privileged over practice. To tease this out, we should recall that Aristotle's conception of theoretical knowledge included both efficient and teleological (purposive) causes. The former are mechanistic, in the sense of technical knowledge, 'pushing' antecedent events into being by means of random interventions. The latter, on the other hand, 'pull' events toward the natural state inherent in the very rational design or meaning of things. Aristotle's practical wisdom then, consisted of the ethical and civic virtues required for a good life and just society, where these reflect the same rational ends as his teleological causes but expressed in local customs (Aristotle 1994; Smith 2002, pp. 35–41; Taylor 1964, 1985, pp. 15–57). Thus, when skeptics such as Descartes challenged the rational metaphysics of Aristotle's final causes (in both theory and practice), efficient causes were all that was left, leaving empiricists such as Bacon to suggest that certainty was only possible when natural laws explain causal relations between objects mechanistically.

What positivists often fail to recall, however, is that David Hume applied Cartesian skepticism to efficient causes just as others had done to final ends, pointing out that empirical laws are contingent not necessary, since events may not turn out as expected. Our faith in causal reasoning is therefore more psychological and cultural than epistemological (Hume 2000). To this Immanuel Kant responded that the necessity of causation is built into the universal structure of mind, not things-in-themselves, by means of which both theoretical laws and practical duties can be discovered (Kant 1998, 2004). It was Kant's response to Hume that allowed positivists like Comte to remain sufficiently confident about causal reasoning as to extend its reach to the human sciences. However, once it is admitted that mind plays a role in the construction of knowledge, it is hard to deny that this structure is relative to history and culture, not universal. To salvage causation, Karl Popper argued that although Hume may have been right that it is impossible to verify the connection between a cause and an effect, it is possible to prove that connection false (Popper 1972, 1992). But this turns out to be an exaggeration: as Popper's disciple, Imre Lakatos pointed out, empirical scientists do not falsify single statements or even more complex theories, but entire research programs; and whether a research program is progressing or degenerating depends to a considerable extent on the cultural initiation of a community of researchers (Lakatos 1978).

This may be why Hegel's epistemological thinking took an entirely different direction after Kant. He abandoned the mechanistic causes of empiricism altogether and revived the transcendental knowledge of Plato's dialectical and Aristotle's teleological reasoning. The purpose of inquiry in this view is to arrive at the rational end of history,

not the universe, which entails absolute freedom expressed in a particular human culture. We progress toward this end when each generation critiques the ideas of its immediate ancestors (Hegel 1953). Hegel's student Karl Marx accepted the idea that the purpose of inquiry is liberation, but argued that this could only be accomplished by critiquing oppressive ideologies used to rationalize the unequal distribution of economic and cultural resources within society. This became the basis for critical social theory (Marx and Engels 1998). Unfortunately, as Foucault maintained, it turns out that liberation from one false consciousness leads only to another (Foucault 1982, 2001).

Edmund Husserl, on the other hand, took this teleological thinking in yet another direction by suggesting that inquiry should seek to understand not the ultimate purpose of history, but the subjective intensions of individuals and the inter-subjective ways people create society and culture. This became the basis for constructivism (Husserl 1960, 1967). But without an ultimate metaphysical or historical end upon which to justify this line of reasoning, it becomes difficult to differentiate the intentions of the subjects of inquiry from those of the researchers seeking to understand them. In short, the romance of western epistemology with certainty born of rational theory, whether empirical or teleological, appears to have reached a dead end (Alexander 2006, p. 212; 1987).

Is there a way out of this cul-de-sac for educational research? It was John Dewey among other pragmatists who most emphatically returned to Aristotle's original distinction between theory and practice, but with an emphasis on the latter rather than the former (Dewey 1938). This led a range of influential educationalists and researchers (e.g. Smith 1983; Smith and Heshusius 1986; cf. Michael Scriven (Chap. 21) and Phillips (Chap. 16) this volume; Sherman and Webb 1988) to justify qualitative inquiry as a methodological alternative to positivism in pragmatic terms.

Dewey, however, was an epistemological monist; he viewed all inquiry as of a piece, applying a new universal logic of trial and error to address all problems experienced in interactions with our surroundings. Thus, when Thomas Kuhn historicized science by arguing that it progresses not by laying one fact on top of another like bricks, but by rejecting the ways in which data and methods are conceived in one research paradigm for a new one, Kuhn was appearing to rely on this idea to justify methodological pluralism in the study of education and other human institutions. Yet even Kuhn himself had not abandoned positivism sufficiently to see social and educational research as other than pre-paradigmatic (Kuhn 1962). Oakeshott, on the other hand, was both a methodological and value pluralist who believed in multiple modes of understanding grounded in diverse practical traditions (Alexander 2008). He sided with Hume in holding that the rational theories are but technical abridgements of

cultural practices. According to this view, meaning is a contingent human achievement enacted in history, not an expression of universal reason given in the structure of the universe à la Aristotle, or mind à la Kant, or history à la Hegel, or class à la Marx, or consciousness à la Husserl, or experience à la Dewey. In short, mechanistic causes acquire meaning from – they do not drive – the practical traditions in which they are embedded.

The Dogmas of Educational Research and Dual-Epistemology Revisited

The truce in the methodology wars rested on this mistaken preference for uniform rational technique in human affairs. This is why it was fragile and ultimately doomed to fail. This preference led to the interrelated assumptions that I have critiqued under the headings mentioned above, both of which harken back to the very origins of empiricism: (1) the two dogmas of educational research which hold that we can distinguish between the cognitive and affective domains on the one hand and between facts and values or truth, beauty, and goodness on the other; and (2) the dual (or multiple) epistemology thesis which states that positivism and constructivism are equally legitimate theories of knowledge.

This first of these returns us to W. V. O. Quine's influential essay "Two Dogmas of Empiricism" in which he argued à la Hume that empiricism itself is grounded in two unsubstantiated assumptions. The first holds that statements whose truth-value depends on their meaning, which are often called *analytic*, can be usefully distinguished from those whose truth-value depends on matters of fact, usually referred to as *synthetic*. The second maintains that the meaning of statements can be reduced by means of some logical construction to immediate sense-experience, which is known as *reductionism*. There are two ways to sustain the analytic/synthetic distinction. According to the first we would need to show that statements such as "no bachelor is married" can be transformed into logical truths of the form "no unmarried man is married." This is possible, however, only if "bachelor" is synonymous with "unmarried man," which presupposes that terms such as these can be interchanged without affecting the truth-value of the sentences in which they appear; and this of course is precisely what it means for a statement to be analytic. The second way to sustain this distinction would be to reduce the meaning of all statements to verifiable sense-data since on this account, analytic statements could be seen as extreme cases of meaning that require no verification. The difficulty with this strategy is that empiricists have produced no way of specifying a sense-datum language and showing how to translate the rest of significant discourse, statement by statement, into it. Until

they do so, Quine maintains, reductionism must be considered another "metaphysical article of faith" (Quine 1999, pp. 20–56).

In educational research these empirical dogmas have their translations: at issue here is the positivist belief that truth is a cognitive affair dependent upon scientifically verifiable facts, while beauty and goodness are tied to the emotions expressed in the arts and humanities. Quantitative research was – is – thought to be tough-minded, scientific and objective, whereas qualitative methods soft, humanistic, and subjective. As qualitative inquiry came into its own, its proponents sought legitimacy in accord with cognitive dominance, first by arguing that it has rigorous checks against error analogous to its quantitative counterparts and subsequently by reference to alternative intersubjective standards such as corroboration, trustworthiness, or authenticity (Alexander 2003, pp. 2–6). This strategy, which I called weak empiricism, left the distinctions between cognition and affect and truth, beauty, and goodness intact by means of a dual (or multiple) epistemology, which distinguished "between at least two conceptions of knowledge, one that aims to discover and explain relations between dependent and independent variables and another that strives to understand human experiences, norms, and purposes" (Alexander 2006, p. 206). However, dual epistemology suffers from a self-refuting (or hard) form of relativism that hinders systematic assessment of merit: each paradigm is thought to have its own assumptions that are protected from critique on the basis of the other. It also discourages mixed-method approaches since each paradigm is isolated from the other, ontologically, epistemologically, and methodologically. Additionally, it misunderstands Kuhn, who was not a methodological pluralist but held that new paradigms should replace the old ones. Finally, it fails to take on board hard questions about the very possibility of uninterested knowledge including whether facts can ever be separated from values or causal laws generalized across cultures (p. 209).

Quine, on the other hand, suggested that the meanings of empirical statements are interconnected with one another in a holistic fashion. This makes talk of the empirical content of single statements misleading since any statement can be seen as necessarily true by reconsidering its relation to other statements in a theory in which, at least in principle, everything is open to revision. Ontology is relative in other words, in the sense that objects of a theory are 'cultural posits' decipherable within the context of a theory as a whole or as interpreted or reinterpreted in another theory, not individually as logical representations of sense experience (Quine 1977). This is a softer relativism than that embraced by dual epistemologists since it does not hold that one theory cannot be criticized on the basis of another (Alexander 1986, 1989). It was this sort of relativism that set the stage for Kuhn and Lakatos to argue that research

paradigms or programs are what Oakeshott called contingent historical achievements that allow us to ‘observe’ the world around us only at the edges of culture.

Although Kuhn and Lakatos may not have been fully aware of it, the upshot of this historical view leads us to follow Hume in the sense that it elevates the logical significance of practical or cultural knowledge as the prism through which such ‘observations’ are made. But this is not as dual epistemologists suggest: to protect one paradigm or program from attack on the basis of another by isolating them from each other. The realm of meaning à la Oakeshott is logically prior to the realm of things and objects, as behaviors and events are semantically predicated on performance and occurrences.

Recognizing that cultural meaning is a prerequisite for technical knowledge involves not only blurring the positivist distinction between cognition and affect but also diminishing the difference between science as the arbiter truth on the one hand and the arts and humanities as agents of feeling and value on the other. The relevant distinction is between neither things and feelings nor facts and values, since Quine’s ontological relativism renders them more or less untenable. Rather it is between two ways of encountering the world outside of consciousness, what Philip Phenix (1972) calls transcendence and Emmanuel Levinas (2005) the radically other: (1) as a meeting between subjects, or (2) as a confrontation between subjects and objects.

In the first instance, as Martin Buber points out, we receive the other into ourselves in a living relationship allowing it to inform our very perception of the world and the ways we choose to interact within it, the intentions we form, norms we follow, and purposes we pursue (Buber 1970). Out of these living relations we construct, following John Searle, the very ontological stuff of human civilization (Searle 1995, pp. 1–30), our grasp of the senses through which we encounter others, the languages we speak, the literatures we study, and the stories we tell our children (which they may later reformulate or reject), about who they are and from whence they have come.

The knowledge that we accumulate within these relationships and transmit across the generations is practical not in the procedural sense employed by some pragmatists that entails solving problems presented in experience, but in the interpersonal sense. It involves relating to the world around us by creating and recreating, interpreting and reinterpreting, together with others with whom we share our lives, ways of what Heidegger called being-in-the-world (Heidegger 1996). The philosopher of education, Israel Scheffler (1983), called this personal knowledge, and contrasts this with propositional and procedural knowledge, distinctions that form a bridge to the second instance. Namely, we assert ourselves, imposing interests on others, both material and human, as if they were only objects available for subjugation to our capacity for understanding, manipulation,

explanation, prediction, and control. To do so we abstract a technical sort of knowledge – deductive, inductive, and dialectical – from the contingent cultural relationships through which we first meet the world. And thus it is ‘technical’, according to Buber, in the instrumentalized sense that it can be used to accomplish ends formulated within those very relationships, which privilege the felt needs of others, not à la Dewey, of our unencumbered selves.

Dialogue and the Formation of Judgment

It is through dialogue of this kind in which we receive a tradition into ourselves, I suggest, that what Oakeshott called cultural ‘engagement’ transpires. Buber insists that we can relate to objects, events, places, texts, and traditions as subjects by allowing them to inform our very beings just as we can relate to human subjects as if they were objects, using them to achieve some instrumental purpose or other. It is out of this sort of engagement with a variety of traditions that one’s capacity to exercise judgment in the process of inquiry emerges. The dialogical process of engaging a tradition of inquiry or research paradigm, then, which begins with understanding and embracing its purposes and intentions before its rules and techniques, is analogous to that of engaging a tradition of social practice such as teaching or learning or schooling in this or another culture by means of such a paradigm. This happens on a number of interconnected levels. On one level we learn to *represent* our feelings through a variety of forms that not only give shape to what we express but also to what we can sense and experience. On another level we learn to *interpret* these representations in ways that allow us to communicate with others and transmit them where appropriate across the generations. On a third level we *construct* the norms and ideals that govern our social lives. On a fourth level, these norms and ideals in turn become the *ethical* guideposts for the conduct of inquiry within these social settings.

According to Suzanne Langer (1957), moments filled with great emotion, from trepidation to elation, may be best captured in non-discursive idioms that strive to convey the dynamic shape of feelings in vicarious experiences expressed in such fine arts as sculpture or dance. She contrasts this with discursive expression in which abstract ideas are communicated by means of direct symbols that bear literal or unambiguous relations to the formal conditions they describe. A dry riverbed, for example, captures the *dynamic* shape of raging water that once flowed between its banks at the moment that it ceased to run, whereas one could *formally* calculate with some precision the volume of water that flowed down the river at any given moment. Artistic language such as metaphor can be said to be ‘alive’ on this account, to the extent that it captures the dynamic shape of lived experience, and ‘dead’ when that

experience is formalized for the purposes of achieving some instrumental end or objective understanding that lies outside the experience itself. Non-discursive expression not only gives voice to our feelings in the world, it also forms what we are able to experience and how we are capable of conceiving it, educating our perception by giving shape to our primordial subject-subject engagements. Only later do we abstract the various instrumental techniques of one or another sort of discursive rationality to achieve ends and pursue interests that emerge from this engagement.

Such processes of interpretation are messy, but it hasn't stopped hermeneutic theorists distinguish between two moments of interpretation. *Exegesis* involves treating a text or artwork like an object, reading out the meanings that lie within by taking into account the intentions of the author or artist and the linguistic, cultural, or historical contexts in which it was written or created (Hirsch 1971). *Eisegesis*, on the other hand, involves encountering a text or artwork as if it were another subject, discovering new meanings through the very process of dialogue with it that may not have been intended by the author or artist, or previously understood in its linguistic, cultural, or historical context (Gadamer 1975). While the former relies upon discursive reasoning to formalize and justify interpretation, the latter depends upon non-discursive expression which gives form to the primordial feelings that emerge from encountering new and innovative ideas and experiences (Alexander 2003, p. 5).

Thus to offer a formal discursive account of the meanings that lie within a text or work of art, we must first acquire the cultural pre-understanding that emerges from encountering it in dialogue; exegesis presupposes eisegesis; discursive expression non-discursive; rational abstraction depends upon artistic engagement. Oakeshott called this cultural pre-understanding the judgment that is acquired through receiving a tradition of inquiry into oneself by embracing its assumptions and standards of merit. In order to 'draw out' the meanings, intentions, correlations, and causes that lie within a culture we must first participate in it, engaging its modes of understanding, languages and literatures, nuances and narratives, roles and rituals, styles, manners, customs and intimations of excellence (Oakeshott 1975, p. 54). In the language of anthropology, to analyze a tradition as an outsider, from the etic perspective, we need first to experience it as an insider, from the emic perspective (Bernard 1995).

Who can claim privilege then in the pursuit of truth? On this account, neither positivist social science, nor weak empiricist accounts of qualitative inquiry that preserve a rigid distinction between subject and object, knower and known, such as are often found in discussions of phenomenology or ethnography, nor critical social theory that strives to unmask hidden and all too often insurmountable power relations. The quest for truth originates in subject-subject not subject-object relations, in direct encounters with and willingness to receive rather than control the other. Although the

feelings that emerge from these encounters are shaped in the non-discursive processes of artistic form – narratives, symbols, representations, and rituals – the content those feelings convey is fundamentally ethical in character, having to do with how we choose to live together with others. What emerges from subject-subject encounters are not rigid rules or causal laws, but norms of conduct and expression that guide the desires, feelings, and purposes of human subjects in ways that enable them both to engage and understand others as well as to create new meanings to be received and understood by them.

Human conduct on this account is both norm-governed and norm-generating, and the norms that emerge from subject-subject encounters are preserved and transmitted across the generations by means of the stories, customs, styles, and nuances of expression that comprise traditions of practice. Understanding these traditions via educational inquiry then, requires first that we grasp the purposes and intentions, the norms that govern conduct and expression, by entering into a dialogue with those who live by them. Only then can we translate the structure of experience from an insider's point of view into the theoretical language of an outsider, or unmask hidden power relations, or measure correlations, causes, and effects, by means of subject-object modes of understanding. Only then can we offer discursive lenses through which to observe, interpret, and assess human interactions, and reflexively too, by acknowledging that these themselves are contingent historical embodiments of culture no less than the traditions they seek to explore.

When it comes to educational research, therefore, what von Wright (1981) once called teleological or purposive explanations are logically prior to causal or scientific explanation. We must first comprehend the reasons why people choose to act or talk in a certain way within the context of the norms, values, or ideals by which he or she lives in order to properly interpret the variables that might influence the choices that they make. These can then be understood from a variety of competing theoretical perspectives that draw on distinct modes of disciplinary understanding including anthropology, sociology, psychology, politics, history, and philosophy. The traditions of educational research include not only the broad methodological categories of quantitative inquiry, qualitative analysis, and critical social theory, but also the widest possible range of disciplines in the social sciences, the humanities, and the arts, as they are brought to bear on questions relevant to educational policy and practice. Additionally, the ethics of human conduct and expression contained in social and cultural norms provides not only the focus of social and educational inquiry, of what we seek to understand and explain, but also the standards according to which we conduct and express that inquiry. We can only grasp another person's purposes and intentions, and hence the variables that might influence them, from within the context of our own.

But how can norms, values, and ideals play such a central role in educational research when they are often contested? One answer lies in the fact that the very idea of inquiry implies standards of assessment grounded in competing conceptions of the good. Of course, some traditions embrace ideals dogmatically. They are resistant to changing circumstances, counter-arguments or contrary experience. They also tend to discourage independent ideas and choices, and understand human behavior as under the control or authority of an external agent or force. Traditions of this kind often appear to provide clear ethical standards against which to judge social policies and programs. But in fact, these dogmatic standards tend to undermine a key condition for ethical discussions to be meaningful – that within reasonable limits people are the agents of their own beliefs, behaviors, and desires. It makes sense to demand that I should behave in this way rather than that only if I am the agent of my own actions able within reasonable limits to choose this rather than that. However, if I am indeed such a free agent, then it must be possible for me to be wrong about even my most fundamental commitments. Were this not the case, if I was right for example because it is in my very nature to be correct, then it would be my nature, not me, choosing my commitments. In other words, for ideals to be ethical, they must be fallible.

Ethical traditions that provide genuine standards of assessment must therefore be dynamic not dogmatic, embracing norms and ideals that represent the best available formulation of the good, at least as we are given to understand it for now, but assuming that there could always be a better way or a more compelling perspective (Alexander 2001; Phenix 1972). Viewed in this light, knowledge of human affairs is always the possession of an embodied agent, constrained by language, culture and history, who grasps, albeit imperfectly, the contours of a world or the meaning of ideas that transcends – exists independently of – his or her limited experience. And this requires – at least as a regulative principle – the existence of a material reality and ethical ideals beyond our own contextualized experience even if their ultimate shape and content remains shrouded in culture, history, language, and tradition (Alexander 2006, p. 214).

Transcendental Pragmatism and the Practice of Inquiry in Education

I call this view transcendental pragmatism. With both Oakeshott and Dewey it conceives all inquiry – be it quantitative, qualitative, and/or critical – as grounded in historically contingent social and cultural traditions of practices, not universal rational ideals. However, again like Oakeshott but unlike Dewey, it admits as a Kantian regulative principle

the existence of entities, ideas, and ideals that are independent of human experience even if we can conceive them only through the prisms of traditions that emerge from the subject-subject encounters in which human cultures originate. The result is what I have called soft, as opposed to hard, relativism which admits that truth and goodness are tied to cognitive and cultural frameworks without undermining the possibility of criticizing one tradition on the basis of another (Alexander 2001, 2006, pp. 212–215).

I have also pointed to at least three consequences of this view for educational research which are worth elaborating here (Alexander 2006, pp. 215–217):

First, all educational research entails a philosophical dimension involving substantive ethics and the analysis of educational aims and aspirations. Not only does the proper interpretation of causation and correlation in the human sciences depend upon understanding human purposes and intentions as part of the social and cultural norms, values, and ideals, that govern people's lives, we can only acquire this sort of understanding from the vantage point of our own aims and aspirations. Hence, educational research worthy of the name can only be properly conducted within the context of explicit and adequately defended visions of the good in which non-dogmatic norms, values, and ideals are articulated to govern policies, practices, and pedagogies. The tendency within contemporary schools of education in leading universities around the world to diminish the presence of properly trained philosophers in favor of so-called hard-nosed empirical researchers specializing in randomized field testing poses a serious threat to the quality of scholarship conducted within those institutions, as much as it does to the standards according to which educational practitioners and policy makers are prepared to embark on their professional careers. The very idea promulgated in the wake of *No Child Left Behind*, that standards in education are first and foremost quantitative, misses the essential point of a standard altogether. That is, to gauge the quality of a practice, to assess whether or to what degree an activity has been preformed in a manner that should be deemed meritorious. But to understand what counts as more or less meritorious, one must first possess a concept of what it means for an activity to be worthwhile, which is precisely the job of an adequately defended vision of the good.

Second, randomized field experimentation cannot be a 'gold standard' of educational research. The very search for correlations and causal explanations in the human sciences depends upon prior understanding of the relevant teleological explanations that address the reasons why people choose to behave as they do, the purposes they hope to achieve, the norms they follow, and the ideals they embody. Indeed, since most forms of qualitative inquiry seek to understand human purposes and intentions they can stand

on their own without any reference to power relations or the relationships between quantitative variables. The same cannot be said for positivist social inquiry or for critical social theory however. Both must be appropriately situated in an account of the relevant social norms and ideals in order to be properly understood. In this sense, quantitative and critical studies in education require in the nature of the case what has come to be called mixed methods, since qualitative understanding is required to make sense of them. On the other hand, though qualitative studies may often benefit from the integration of various forms of measurement or radical criticism depending of course on the research question involved, making sense of them does not necessarily depend upon correlations, causes or power relations.

Finally, norms, values, and ideals are best understood by analyzing concrete cases. Correlation and causation can add nuance and precision, but the search for abstract covering laws do not constitute the most appropriate approach to understanding human purposes and intentions. The logic of illustration, in other words, is prior to the logic of generalization in the study of human activity. It is a category mistake of the first order to understand illustration as a form of weak empiricism by reference to such irrelevant concepts as reliability, validity, and generalizability. Illustration is rather more like coming to understand a nuanced use of language or a fine point of law than a statistical regularity. Language and law are best grasped by means of a limited number of clear and detailed cases that illuminate practices and principles that can be applied in a host of circumstances well beyond their confines. To be sure, these cases can be and often are combined with tests and measures or radical analysis in a variety of useful ways, such as to assist in learning a language or in convincing a judge or jury to apply the law in certain ways under particular circumstances. But to communicate in a language or interpret the law one must first understand the practices and principles that govern their use. So too in the study of education: correlations, causes, and radical criticism may assist in improving the practice of a particular pedagogy or in convincing policy makers to think about current circumstances in new and innovative ways, but to achieve these ends there is no substitute for understanding the norms, values, and ideals of the culture that seeks to transmit itself across the generations within the context of the aims and aspirations of a clear and defensible concept of the good.

The positivist seeks to explain events on the basis of causal laws so that they can be predicted and controlled, and the critical social theorist to unmask oppression hidden necessarily in social relations. But we should be wary of such aims, which can be traced to what Oakeshott called the fallacy of rationalism in politics. The fact that another person's behavior can sometimes be predicted does not authorize one to control it and social relations do not always

embody unjust assertions of power. People are subjects not objects; to understand them we must endeavor to meet them in dialogue, to receive their thoughts, feelings, and desires into ourselves, to allow them if only for a moment to use Buber's famous phrase, to 'fill the firmament'. On this account, educational research is about grasping the norms and ideals, the traditions of practice, through which they have come to comprehend a world that transcends culture through the prism of our own defensible aims and aspirations. Nel Noddings (1984, p. 30) calls this engrossment or feeling with another rather than empathy or putting oneself in her place; it requires of the educational researcher a stepping back rather than forward, an act of limitation rather than assertion, of self-control rather than domination over others. Ethics, as Levinas (2005) put it, is first philosophy in the study of human subjects, and there is no substitute for this ethical stance if we are to truly understand what it means to educate ourselves and others.

Note on Contributor

Hanan Alexander is Professor of Philosophy of Education at the University of Haifa. His book *Reclaiming Goodness: Education and the Spiritual Quest* (Notre Dame University Press) won a 2001 National Jewish Book Award. He has edited *Spirituality and Ethics in Education: Philosophical, Theological, and Radical Perspectives* (2004), *Citizenship, Education, and Social Conflict: Israeli Political Education in Global Perspective*, with Hallel Pinson and Yossi Yonah (2010) and *Commitment, Character, and Citizenship: Religious Schooling in Liberal Democracy* with Ayman Agbaria (2011); and is currently working on a new book entitled *The Transcendental Imagination: Liberal Education as Spiritual Critique*.

References

- Alexander HA (1986) Cognitive relativism in evaluation. *Eval Rev* 10(3):259–280
- Alexander HA (1987) Is phenomenology the basis for qualitative inquiry? *Philos Educ Proc* 43:567–574
- Alexander HA (1989) Liberal education and open society: absolutism and relativism in curriculum theory. *Curriculum Inq* 19(1):11–32
- Alexander HA (2001) *Reclaiming goodness: education and the spiritual quest*. University of Notre Dame Press, Notre Dame
- Alexander HA (2003) Aesthetic inquiry in education: community, transcendence, and the meaning of pedagogy. *J Aesthet Educ* 37(2):1–18
- Alexander HA (2006) A view from somewhere: explaining in paradigms of educational research. *J Philos Educ* 40(2):205–221
- Alexander HA (2008) Engaging tradition: Michael Oakeshott on liberal learning. In: Stables A, Gough S (eds) *Sustainability and security within liberal societies: learning to live with the future*. Routledge, New York, pp 113–126
- Althusser L (1999) *Writings on psychoanalysis*. Columbia University Press, New York

- Aristotle (1994) *Metaphysics* (trans: Bostock D). Clarendon Press, Oxford
- Bacon F (2002) *The new organon* (Jardine L and Silverthorne M (eds)). Cambridge University Press, Cambridge
- Bernard HR (1995) *Research methods in anthropology*. Rowman & Littlefield, Lanham
- Bodgan R, Bilken SK (2006) *Qualitative research for education*, 5th edn. Allyn & Bacon, Boston
- Bourdieu P (1990) *The logic of practice* (trans: Nice R). Polity Press, Cambridge
- Buber M (1970) *I and thou* (trans: Kaufman W). Scribners, New York
- Callahan R (1964) *Education and the cult of efficiency*. University of Chicago Press, Chicago
- Campbell DT, Stanley J (1963) *Experimental and quasi-experimental design for research*. Rand McNally, Chicago
- Clandinin DJ, Connelly FM (2000) *Narrative inquiry: experience and story in qualitative research*. Jossey-Bass, San Francisco
- Comte A (1988) *Introduction to positive philosophy*. Hackett, London
- Descartes R (1999) *Discourse on method* (trans: Clark DM). Penguin, London
- Dewey J (1938) *Logic: a theory of inquiry*. Henry Holt, New York
- Egan K (2004) *Getting it wrong from the beginning: our progressivist inheritance from Herbert Spencer, John Dewey, and John Piaget*. Yale University Press, New Haven
- Eisenhart M (2005) Hammers and saws for the improvement of educational research. *Educ Theor* 55(3):245–261
- Eisner EW (1991) *The enlightened eye: qualitative inquiry and the enhancement of educational practice*. Macmillan, New York
- Erickson F, Guitierrez K (2002) Culture, rigor, and science in educational research. *Educ Res* 31(8):21–25
- Feuer MJ, Towne L, Shavelson RJ (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Foucault M (1982) *The archeology of knowledge and discourse on language*. Pantheon, London
- Foucault M (2001) *The order of things: an archeology of the human sciences*. Routledge, New York
- Freire P (2005) *Education for critical consciousness*. Continuum, London
- Gadamer H-G (1975) *Truth and method*. Seabury Press, New York
- Guba E (1978) *Toward a methodology of naturalistic inquiry in education*. UCLA Center for the Study of Evaluation, Los Angeles
- Guba E (1990) *The alternative paradigm dialog*. In: Guba E (ed) *The paradigm dialog*. Sage, Newbury Park, pp 17–27
- Guba E, Lincoln Y (1985) *Naturalistic inquiry*. Sage, Beverly Hills
- Guba E, Lincoln Y (1989) *Fourth generation evaluation*. Sage, Newbury Park
- Harvey L (1990) *Critical social research*. Routledge, New York
- Hegel GWF (1953) *Reason in history* (trans: Hartman RS). Bobbs-Merrill, Minneapolis
- Heidegger M (1996) *Being and time* (trans: Stambaugh J). SUNY Press, New York
- Hempel CG (1966) *The philosophy of natural science*. Prentice-Hall, Englewood Cliffs
- Hirsch ED (1971) *Validity in interpretation*. Yale University Press, New Haven
- Horkheimer M, Adorno T (2007) *Dialectic of enlightenment*. Stanford University Press, Palo Alto
- Hume D (2000) *An enquiry concerning human understanding*. Clarendon, Oxford
- Husserl E (1960) *Cartesian meditation* (trans: Cairns D). M. Nijhoff, The Hague
- Husserl E (1967) *Ideas* (trans: Boyce Gribson R). Allen & Unwin, London
- Kant I (1998) *Critique of pure reason* (trans: Guyer P, Wood AW). Cambridge University Press, Cambridge
- Kant I (2004) *A prolegomenon to any future metaphysics* (trans: Hatfield G). Cambridge University Press, Cambridge
- Kincheloe JL, McLaren PL (1994) *Rethinking critical theory and qualitative research*. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*. Sage, Thousand Oaks, pp 138–157
- Kliebard H (2004) *The struggle for the American curriculum, 1893–1958*, 3rd edn. Routledge, New York
- Kuhn T (1962) *The structure of scientific revolutions*. University of Chicago Press, Chicago
- Lakatos I (1978) *The methodology of scientific research programmes*. Cambridge University Press, Cambridge
- Langer S (1957) *Problems of art*. Scribners, New York
- Levinas E (2005) *Humanism of the other*. University of Illinois Press, Urbana-Champaign
- Lucas G (1972) *Critical anthropology*. New School for Social Research, New York
- Marx K, Engels F (1998) *The German ideology*. Prometheus, New York
- McLaren P (1994) *Life in schools: an introduction to critical pedagogy in the foundations of education*, 2nd edn. Longman, White Plains
- Moss PA (2005) *Understanding the other/understanding ourselves: toward a constructive dialogue about 'principles' in educational research*. *Educ Theor* 55(3):268–283
- Nagel E (1961) *The structure of science*. Routledge & Kegan Paul, London
- Noddings N (1984) *Caring: a feminine approach to ethics and moral education*. University of California Press, Berkeley
- Oakeshott M (1962) *Rationalism in politics*. Methuen, London
- Oakeshott M (1975) *On human conduct*. Clarendon, Oxford
- Oakeshott M (1989) *The voice of liberal learning*. Yale University Press, New Haven
- Patton MQ (1990) *Qualitative evaluation and research methods*. Sage, Newbury Park
- Phenix PH (1972) *Transcendence and the curriculum*. *Teach Coll Rec* 73(2):271–283
- Plato (1987) *The republic* (trans: Lee D). Penguin, London
- Plato (2002) *Phaedrus* (trans: Waterfield R). Oxford University Press, Oxford
- Popkewitz T (1984) *Paradigm and ideology in educational research: the social functions of the intellectual*. Falmer, London
- Popper KR (1972) *Objective knowledge*. Clarendon, Oxford
- Popper KR (1992) *The logic of scientific discovery*. Routledge, London
- Quine WVO (1977) *Ontological relativity*. Columbia University Press, New York
- Quine WVO (1999) *From a logical point of view*. Harvard University Press, Cambridge
- Ricoeur P (1970) *Freud and philosophy* (trans: Savage D). Yale University Press, New Haven
- Ricoeur P (1974) *The conflict of interpretations* (trans: Ihde D). Northwestern University Press, Evanston
- Ricoeur P (1981) *Hermeneutics and the human sciences* (trans: Thompson JB). Cambridge University Press, Cambridge
- Rist R (1977) *On the relation among educational research paradigms*. *Anthropol Educ Quart* 8(2):37–57
- Scheffler I (1983) *Conceptions of knowledge*. University of Chicago Press, Chicago
- Searle J (1995) *The construction of social reality*. The Free Press, New York
- Shadish WR, Cook TD, Campbell DT (2002) *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin, Boston
- Sherman RR, Webb RB (eds) (1988) *Qualitative research in education: focus and methods*. Palmer Press, London
- Smith JK (1983) *Quantitative versus qualitative research: an attempt to clarify the issue*. *Educ Res* 12(3):6–13

- Smith NH (2002) Charles Taylor: meaning, morals, and modernity. Polity, Cambridge
- Smith JK, Heshusius L (1986) Closing down the conversation: the end of the quantitative-qualitative debate among educational inquirers. *Educ Res* 15(1):4–12
- St. Pierre E (2002) ‘Science’ rejects postmodernism. *Educ Res* 31(8):25–28
- Stake R (1995) The art of case study research. Sage, Thousand Oaks
- Taylor C (1964) The explanation of behavior. Routledge & Kegan Paul, London
- Taylor C (1985) Philosophy and the human sciences. Cambridge University Press, Cambridge
- Tyack D (1974) The one best system: a history of American urban education. Harvard University Press, Cambridge
- von Wright GH (1981) Explanation and understanding. Cornell University Press, Ithaca

Traditions of Inquiry: Should We Talk of Different Paradigms After All?

3

Richard Pring

Abstract

Much educational research, particularly at PhD level, is premised on there being a deep division between qualitative and quantitative research. Indeed these are seen to follow from different and incompatible paradigms of what counts as truth and knowledge. This response to Alexander's chapter further questions the tenability of this dichotomy. There are different kinds of research, the methodology depending on the questions being asked.

Keywords

Paradigms • Positivism • Critical realism • Traditions of inquiry

The traditions of inquiry in education (or, put in another way, the paradigms of educational research) to which Hanan Alexander refers, stem on the one hand, from the positivism articulated by Comte and, on the other, from what is referred to as 'cultural anthropology'. A third tradition emerges from 'radical social criticism', which 'deconstructs' so-called objective truths into the reflections of those who, consciously or unconsciously, exercise their power in defining what was to be defined as true.

While Alexander dissects these traditions into their several and subtle varieties, many Ph.D. theses maintain these distinctions particularly when introducing their methodology chapter. The onus, it appears, is that somehow one has to opt for one or the other: of 'quantities' and the 'quantitative' or 'qualities' and 'qualitative' research. Generally reasons for adopting a 'qualitative method' are rehearsed, the quantitative being associated with the positivism so well outlined by Alexander. The standard approach is to articulate why a quantitative research design is inappropriate for reaching an understanding of human beings and of the societies which they have formed, for these require an understanding of

mental and social as well as physical lives. 'Positivism' for such researchers has assumed a disparaging connotation. It has, in the view of many, nothing to do with understanding human beings as thinking, deliberating, feeling, and intentional objects or with understanding the societies which embody shared meanings and values. Hence, the proliferation of case studies, in-depth interviews, and the general fear of generalisations. Health warnings about generalisations are frequently issued.

The dichotomy between quantitative (= 'positivist') and qualitative (shaped by anthropology) – or the trichotomy between these two and the critical realist (verging into the post-modernist) – traditions is of course a simplification, as Alexander's analysis shows. But it is a simplification frequently not seen as such by many research students or their academic mentors. Indeed, university education departments still remain heavily 'tribalised' by such matters (Becher and Trowler 2001), the quantitative researchers regarding with contempt the tiny samples of qualitative researchers, while the latter regard as irrelevant the large scale randomised controlled experiments (RCE) of the former. Moreover, the politicians and their civil servants have a preference for the RCE. Numbers seem more convincing for developing policy than the in-depth interview with a struggling school principal. Certainly they are averse to any suggestion that what they, the politicians, fervently promote is anything but an ideological reflection of the dominant political power.

R. Pring (✉)
Department of Education, University of Oxford, Oxford, UK
e-mail: richard.pring@education.ox.ac.uk

These divisions, frequently at war, are often referred to as rival and irreconcilable paradigms of knowledge – incompatible ideological claims to what we can be said to know.

There is, of course, some basis in reality for such a conclusion. I remember vividly being accepted in Professor A.J. Ayer's department of philosophy at University College London in 1962. Ayer, as author of *Language, Truth and Logic*, and persuasively promoting the Principle of Verification, reduced the common room to almost permanent silence. The Principle – namely, that only those statements are meaningful which can be verified either, ultimately, in terms of sense experience or by logical reduction to tautology – meant that all the interesting topics we wanted to talk about were but the expressions of emotion – contemptuously rejected as the 'boo-hurrah' theory of morality (and of aesthetics and of religion).

On the other hand, I have had dealings with one university where any sample of more than one is seen suspiciously as lacking in depth and subtlety in the understanding of distinctively human reality.

Are these wars more than ideological? Does it matter into which paradigm researchers are socialised into it, counselled away from, encouraged to criticise and surpass?

Alexander thinks so, and traces the different traditions with a welcome detail, showing, with appropriate distinctions and caveats, the more complex interpretations of them and thereby undermining the claims to major and incompatible research traditions. The differences within each tradition are as significant as the distinctions between them. There may not be the need for the rigid dichotomy (or trichotomy) which is often assumed – and reflected (in the phrase borrowed from Kuhn) in the reference to different 'paradigms' or indeed to different 'epistemologies'.

II

Alexander brings to bear upon the 'war of ideologies' a very different perspective, one which begins with all the subtleties of human (and in this case educational) inquiry. Questions for educational inquiry are essentially practical, rather than theoretical. They are concerned, from Plato onwards, with such questions as 'What must we do to educate the young?', or 'How should we organise the provision of education?', or 'How might our teaching prepare better the next generation to be good citizens?' The answers to such questions can be answered in no one 'paradigm'. Nor can one's thirst for an answer be assuaged by the belief that all answers are but the reflection of dominant power groups. If so, why bother with inquiring?

The practical nature of inquiry transforms the philosophical problem. 'Truth' and 'knowledge' are more complex concepts, as the quintessentially American tradition of pragmatism (invoked by Alexander) shows. But, without yet entering into the pragmatist theory of meaning, it is important to tread, as Alexander does, a little of the path previously trodden by Michael Oakeshott, for whom the practical world of politics provided a similar world to that of educational deliberation. After all, the two are closely intertwined.

Practical inquiry does not follow the route of 'technical inquiry', concerned as it is with the causal relations between physical objects and with explanations within the purely physical world. Rather, it is imbued with our conceptions of what is good and worth pursuing, with understandings of the social contexts and relationships within which one is looking for a way forward, and with appreciations of what others think and feel with whom one is unavoidably interacting. But those conceptions, understandings and appreciations, which imbue and permeate all such practical pursuits, are not the stuff of empirical inquiry. They are what we have inherited through cultural transmission. The values we adopt, the implicit understandings of society and the appreciations of others are embedded in forms of life, which themselves have evolved through the constant interactions and the practical solutions to problems that generation after generation have had to face.

There are, of course, serious examinations and dissections of those different ways of valuing, understanding and appreciating, in what Oakeshott refers to as 'the conversation between the generations of mankind'. Those conversations are captured in 'the voices' of poetry, history, philosophy, drama, sciences, religion, and so on (Oakeshott 1972). One might add to Oakeshott's list of 'voices' those of the craft traditions reflected in the creative doers and makers, not written down in books but handed on from generation to generation.

To understand human beings and to understand the societies (formal and informal, large and small) of which they – or we – are members, one needs to understand the cultural context in which one makes sense of a life, personally and socially. These contexts and senses embody what it means to be human, and are often revealed through the arts and humanities. There is, therefore, this important cultural knowledge, as Elliot Eisner (1985) as for so long argued, at the heart of educational enquiry and research. The dichotomy or trichotomy between qualitative, quantitative and critical realist traditions becomes even more shaky. And that cultural understanding is acquired through a sort of apprenticeship and connoisseurship, in which the learner or researcher comes to grasp slowly and often painfully a

clearer understanding of the (in this case educational) world he or she is seeking to understand.

A more pragmatist twist to this understanding of educational inquiry would be that all such inquiry begins with a puzzle. One has reached a 'forked road' situation. In resolving that puzzle – in deciding which road to progress along – one seeks further evidence. Such evidence might come from many quarters. It might come from immediate experience, or from conversations with others, or from what one reads in a book. Each bit of evidence transforms to some extent how one sees the problem and its possible resolution. But that resolution itself must be provisional and tentative as yet further experience requires further mental adjustment. That gradual making sense of experience and of the world has no end. Further experiences might provisionally confirm one's present beliefs or they might not do so. Negative results from one's move up one of the forked roads require a re-formulation of the problem.

Such inquiry (such 'intellectualised action', as Dewey (1933) refers to thinking) gives rise to many different questions. Some require a more quantitative answer, others a deeper understanding of the social norms or rules which shape a person's behaviour. Yet others call for some knowledge of the historical context of the scene investigated, yet others again need greater insight into the intentions and ambitions of the principal players. Practical inquiry fits into no paradigm or epistemological divide, but rather calls for evidence related to different sorts of questions. These are not different paradigms of knowledge, but different ways of answering logically distinct questions, the answers to which transform the way in which the world is experienced and opening up further lines of inquiry.

III

There are two issues, however, which need resolution.

First, there might still remain a suspicion shown to those who, despite the need for cultural and phenomenological understandings of persons, yet treat persons as sufficiently alike for the purposes of classifying and quantifying them (in education, the 'slow learners', the 'gifted and talented', the 'disengaged'). But real understanding, so the argument goes, requires the penetration of what is distinctive of each individual. Student Smith's failure cannot be explained by reference to his being one of a category of people who tend to fail. There needs to be greater insight into Smith himself. Each is unique.

The uniqueness argument is fallacious. I am unique in some ways but not in others. My being male, middle class, living in the university city of Oxford, does put me into a

certain category, which has features shared with other people in that category and influencing how I see and interpret the world. We are each unique in some respect but not in others. For instance, the failure of so many white working class young males is not caused by their being so classified. But being in such a group explains how they might have internalised certain values and motivations. Some numerical account of people of a particular kind (by gender, ethnicity, social class or disability, say) is not at odds with the qualitative understanding of the social norms which enter into their understanding of the world. Indeed, such quantitative accounts show the need for the different, but compatible questions to be asked.

Second, once again the uniqueness fallacy creates an unnecessary divide between different modes of inquiry, giving rise to the belief in the incompatibility of one method of enquiry with another. To understand other people does require entering into the cultural tradition through which their understanding of the physical, social and moral worlds have been internalised. How can that be understood by someone from a very different cultural tradition? How can the researcher from the more advanced Western world, sent by the World Bank to research the needs of an isolated rural population in an undeveloped and religiously different part of Asia, really understand that population? To understand that very different world would require the discarding of the cultural assumptions one starts off with and to enter into a very different cultural world, language, ritual, relationship norms, and so on. But that would seem practically and culturally impossible, and even if it was not so, is there not a logical difficulty in translating the newly entered culture into the previous one without complete loss of meaning?

The difficulties and answers to this dilemma were well rehearsed by Peter Winch long ago in his *Idea of a Social Science* (1958). Roughly what researchers need to remember is that whatever the different forms of social and cultural life which divide us and make mutual understanding difficult, there is a human form of life that we all share. There is as much in common as there are differences. And it is this commonality which enables educational researchers, with an effort may be, to enter sufficiently into other groups and cultures in order to get some understanding which can be broadcast more broadly.

In so understanding, we need to ask many questions in educational research which demand logically different kinds of answer – some reflecting the process of thinking in particular individuals, others fathoming the social norms which have been internalised by the agent, yet others quantifying the common modes of behaviour amongst groups of people – be they teachers, learners, educational

administrators, policy-makers, or some other such category or categorisation for the purposes of educational research.

But we must not fall into the trap of referring to these different questions as being incompatible or belonging to different paradigms of knowledge.

Note on Contributor

Richard Pring was the first Professor of Educational Studies at the University of Oxford and Director of the Department. After 14 years he retired to lead, for 6 years, the Nuffield Review of 14–19 Education and Training for England and Wales. His most recent book is *John Dewey: Philosopher of Education for the 21st Century*, London: Continuum.

References

- Becher T, Trowler PR (2001) *Academic tribes and territories: intellectual inquiry and the culture of disciplines*, 2nd edn. Open University Press, Buckingham
- Dewey J (1933) *How we think*. Heath & Co., New York
- Eisner EW (1985) *The art of educational evaluation: a personal view*. Falmer Press, London
- Oakeshott M (1972) *Education: the engagement and its frustration*. In: Dearden RF, Hirst PH, Peters RS (eds) *Education and the development of reason*. Routledge & Kegan Paul, London, pp 19–49
- Winch P (1958) *The idea of a social science and its relation to philosophy*. Routledge & Kegan Paul, London

David Bridges

Abstract

Running through this chapter is a distinction between *discipline* as a general requirement on any enquiry which aspires to the status of ‘research’ for it to be conducted in a rigorous and systematic way, and *a discipline* as a particular evolved form of such systematic and rule governed enquiry. The chapter begins by describing the recent history of the disciplines which have informed educational enquiry. It pays particular attention to the way some of the longer established disciplines have fragmented and the way in which they have been joined by new forms of enquiry drawn from almost every part of the academy. The result is that educational enquiry is constituted by a perhaps bewildering array of diverse balkanised and hybridised disciplines that has prompted some to talk of an era of postdisciplinarity. However, the surrender of discipline in the more generic sense comes at a very high price. Without what Schwab calls its ‘syntactical structure’ any form of educational enquiry loses the basis of its claim to credibility, let alone to its particular honorific standing as research. Worse, it undermines the very possibility of a community of arguers. The final section examines the argument as to whether disciplines constitute obstacles to free and open enquiry, power structures which exclude some forms of enquiry as well as privileging others. It argues that disciplined enquiry is needed to reveal and critique power/knowledge structures and not just to protect them. The very diversity of forms which educational enquiry assumes today is some protection from a particular academic hegemony.

Keywords

Discipline • Epistemic community • Post-disciplinarity • Systematic • Rules

Discipline and Disciplines

The scientific treatment of any art consists partly in applying the principles furnished by the several sciences involved, as chemical laws to agriculture; partly in enforcing, throughout the discussion, the utmost precision and rigour in the statement, deduction and proof of the various maxims or rules that make up the art.

(Bain 1897, p. 1)

These opening lines from *Education as a Science* by Alexander Bain, Professor of Logic and of Literature at what was then the recently established University of Aberdeen, neatly reflect two different but related ways in which we talk about discipline in relation to educational research.

First, there is the more general sense in which we can distinguish between, on the one hand, enquiry which is disciplined, i.e. conducted with ‘precision and rigour’ as Bain puts it or which is ‘systematic and sustained’ (Peters and White 1969, p. 2, and also Stenhouse 1980); and, on the other, enquiry which fails to meet these requirements: enquiry based, perhaps, on somewhat cursory examination of the evidence, enquiry informed by rumour or unreliable sources, and/or enquiry conducted carelessly, uncritically

D. Bridges (✉)
Faculty of Education, University of Cambridge, Cambridge, UK
e-mail: db347@cam.ac.uk

and with little concern for the accuracy or logical consistency. The term research is what is sometimes referred to as an ‘honorific’ concept. In bestowing the honorific title of ‘research’ on any enquiry (and leaving aside whether we would recognise it as good research) we are suggesting that it meets at least certain standards of thoroughness, carefulness, accuracy, rigour. Thus, enquiry simply does not qualify as research at all unless it is in this sense disciplined.

Then, secondly, we talk of ‘a discipline’ or ‘the disciplines’ to refer to relatively well established forms of systematic enquiry: evolved ways of going about enquiry that have their distinctive methods and methodologies; a relatively coherent view of the conditions which need to be satisfied for a proposition to be taken seriously (truth conditions perhaps); rules (largely implicit in the practice of particular forms of enquiry) and a shared language that are a necessary condition for social interaction and engagement around a particular form of enquiry; a public space in which the products of such argument can be exposed to critical scrutiny; and an accumulated body of work within the particular tradition. (When A. J. Ayer was asked by a visitor, ‘What is Philosophy?’ he is reported to have waved his arm in the direction of his bulging bookshelves and answered ‘It’s all that’.) These disciplines have traditionally been protected and developed over the years by organisational structures which have included, in particular, university chairs, departments and degree programmes, and learned societies and their journals. In the academies they have born such familiar titles as natural science, history, mathematics, philosophy, psychology, though such categories have evolved historically, been re-configured, have divided, combined and hybridised to generate what in the contemporary academy is a bewildering array of possibilities.

Clearly, as Bain indicates, discipline in both these senses has application to educational research. For Bain, as in discourses in the European tradition in our own time (e.g. when the French refer to *les sciences de l’éducation*) educational enquiry is ‘scientific’ not, as sections of the Anglo-American community seems to suppose, in so far as its methods resemble those of the natural sciences but in so far as they are conducted systematically and rigorously and according to the rule governed requirements of the appropriate discipline(s). However, as the French nomenclature indicates, Education has not on the whole been regarded as a single discipline in its own right. Educational research ‘is not itself an autonomous form of knowledge or an autonomous discipline. It involves no conceptual structure unique in its logical features and no unique test for validity’ (Hirst 1966, p. 55). Rather, Education has been seen as a field of practice, policy, theory and enquiry which draws on and can be informed by a *variety* of other disciplines of enquiry rooted in the academy as well as by the collective and reflective understanding generated by practitioners in the field. But what are these disciplines?

Which Are the Disciplines Which Can Contribute to Educational Enquiry, and What Can They Contribute?

A detailed historical or comparative approach to this question would no doubt throw up some different answers. There have been some rather different patterns of the development of Education as a field of enquiry in continental Europe (see, for example, Levering 2001, and DePaepe 2001) and across the world that have reflected different historical, cultural and institutional locations. Writing more specifically about the history of pedagogy as ‘a scientific and separate discipline’, Bengtsson (2002) suggests, however, that “The road . . . was not similar in all Western countries and did not always follow the same pace, but . . . most countries have followed the same stages” (p. 7). He describes how Bertil Hammer, in his 1910 inaugural lecture as the first Chair in pedagogy in Sweden, provided an account of pedagogy divided into three main branches, ones with which later scholars would find no difficulty in identifying:

- (i) trying to fix the goal of education in so far as the historical process of education (*bildningsgan*) displays it: this will be the task of *philosophical or teleological pedagogy*;
- (ii) studying the process of education (*uppfostringsprocessen*) close at hand as it appears for the individual person; in other words to investigate the biological and psychological conditions that determine the child’s development: *individual or psychological pedagogy*;
- (iii) studying education at large as a social phenomenon, of which the historical and social conditions are to be demonstrated: *social pedagogy (including historical pedagogy)*.

(translated Bengtsson 2002, p. 7, from Hammer 1988)

This picture of the contributing disciplines to educational enquiry was very close to what achieved particular authority and influence in the UK and the wider English speaking world (in particular) in the late 1960s and early 1970s. Tibble’s influential edited work *The Study of Education* (Tibble 1966) contributed significantly to the definition of the subject in the newly emergent Bachelor of Education¹ degrees at the end of the decade in which it was published. Following a historical introduction by Tibble and Hirst’s paper on ‘Educational Theory’, four leading protagonists stepped forward to present: ‘The Philosophy of Education’ (Richard Peters); ‘The History of Education’ (Brian Simon); ‘The Contribution

¹The B.Ed. offered trainee teachers the possibility of a 4-year programme incorporating concurrent elements of subject study, teaching preparation and practice and educational theory leading to a degree. This rapidly replaced the previous 3-year Certificate of Education programme. It also prompted in the UK what became known internationally as the ‘universitification’ of teacher training, since only universities could award degrees.

of Psychology to the Study of Education' (Ben Morris); and 'The Sociology of Education' (William Taylor). Thus were the 'foundation' disciplines of education temporarily defined not only for several generations of students in teacher training on new degree level programmes but also the staff who were teaching them and who embarked, therefore, on masters and doctoral programmes designed to equip them for their new roles in higher education. Consequently, thus too were defined some of the most powerful categories under which educational research was conducted and validated.

However, these foundation disciplines only ever provided provisional forms of coherence and temporary alliances between what were often radically different traditions. The sociology of education, for example, contained everything from traditional hard data survey people through ethnographers, neo Marxists and critical theorists to post-modernists and social relativists. Psychology spanned neuro-physiology, behaviourism, cognitivism and constructivism through to psychoanalysis. The ideological and methodological differences between these communities of scholars were at least as great as anything they might have in common. Increasingly through the 1980s and 1990s these fault lines in the foundation disciplines became more evident and new, more segmented intellectual communities and practices emerged.

Over the same period three linked developments in the UK – in parallel with and interacting with developments in particular in the US and in Australia – contributed to the erosion of the dominance of the four disciplines in educational discourse – and Lawrence Stenhouse had a hand in all three. The first was the emergence of Curriculum as, if not a new discipline in educational studies, then at least a powerful instrument for breaking down the barriers between the disciplines and demonstrating their capacity to inform in different and more integrated ways a rapidly evolving field of educational development and practice – and one in which national policy and local practice had to be joined together in some way (see, for example, Stenhouse 1975). The second was the development of classroom action research to which Stenhouse's colleague, John Elliott, made a major contribution. (A number of his writings, which remained informally circulated for some time were brought together in Elliott 1991). The third development under this same patronage was the expansion of the repertoire of research methodologies in the interests of understanding and sharing different perceptions of classroom experience – a garnering of, in particular ethnographic research methods and case study of which Stake was perhaps the most masterly exponent (Stake 1995, *inter alia* and see for example, Simons 1980); the development by Stenhouse of case study as 'contemporary history' (Stenhouse 1980); and the articulation by Parlett and Hamilton (1972) of evaluation as 'illumination' and by MacDonald (1972) of 'democratic evaluation' (both

originally in papers presented at a 1972 invitation seminar at Churchill College Cambridge, but now most readily available in Murphy and Torrance 1987).

From these and other sources we have seen, since Tibble's presentation of the study of education a huge expansion in the intellectual resources which have been brought to this study: from every nook and cranny of the academy and especially from ethnography; from the study of language and literature and discourse analysis; from economics; from neuro-science; from law; from biography and autobiography; from cultural studies and museology; from politics, policy studies and political theory; and, more hesitantly perhaps from the creative arts, from photography, poetry and from narrative fiction. The educational research community seems to have taken to heart the view articulated by Elliot Eisner in his 1993 address to the American Educational Research Association: "If there are different ways to understand the world, and if there are different forms that make such understanding possible, then it would seem to follow that any comprehensive effort to understand the processes and outcomes of schooling would profit from a pluralistic rather than a monolithic approach to research" (Eisner 1993, p. 8).

So, in the twenty first century we have to acknowledge that as a simple matter of fact the educational research journals (which themselves have multiplied and diversified to the point that it is practically impossible even to keep track of what is out there) are full of material that draws on the research practices and theoretical insights of almost every part of the academy.

What actually gets drawn into the educational research field from any particular discipline is quite variable. It includes, for example:

- *Research methods and methodologies*: discourse analysis from literary and cultural studies; iconographic interpretation from ethnography and museology; multilayered modelling from statistics and economics; 'participatory' research from development studies; double blind controlled experiments from medical science and clinical psychology; life history from history and biography; deconstruction from literary studies and politics.
- *Different forms of representation of research*: case studies and thick description as well as more analytic and interpretative writing; narratives and stories; visual representations and websites. After all, as Elliot Eisner argued: "The meaning that representation carries is both constrained and made possible by the form of representation we employ. Not everything can be 'said' with anything. Poetic meaning requires poetic forms of thought and poetically treated form. Visual art requires forms of thought that address the import of visual imagery. How we think is influenced by what we think about and how we choose or are expected to represent its content" (Eisner 1993, p. 7).

- *Theoretical and interpretative frameworks*; feminism from sociology and politics; capability theory from development economics; self concept and identity theory from social psychology; critical theory from neo Marxist political economy; grounded theory from ethnography; postmodernisms from, in particular, continental European literary, politics and social science.

As if this was not abundance enough, the story continues. Neither in their homes in university departments nor in their application in educational settings did this wide range of ‘disciplines’ remain securely insulated from each other. Increasingly in the wider academy and in educational research new alliances were formed as the links between some of these research practices were observed and built upon and new hybrids of research developed. Many of the most influential theoretical thinkers are in any case extremely difficult to locate in single categories. Do you put the work of Derrida or Foucault under literary studies, politics, philosophy, sociology or history – or all of these?

So we have seen: (i) a huge extension in the range of intellectual resources which have been drawn into educational enquiry; (ii) what might be regarded as the fragmentation of some of the more established disciplines; and (iii) the recombining and hybridisation of different traditions in new forms. In the field of educational research the returns to the 2001 UK Research Assessment Exercise provided clear evidence of creativeness (or recklessness) in combining, crossing over or perhaps ‘transgressing’ traditional disciplinary structures in a context of what some have described as ‘post-disciplinarity’. Among, admittedly, the less conventional descriptions provided of the methodology of work submitted for assessment I noted: ‘New Paradigm/heuristic/dialogic methods’; ‘historical political sociology’; ‘ideological history, curriculum and cultural theory’; ‘social constructionism – socio-philosophical analysis’; and ‘Narcissus myth and deconstruction’.²

None of these developments, of course make it easy for newcomers to make sense of the territory of educational enquiry or to map its disciplinary character, let alone to make consistent judgements of the quality of research writing. In a contribution to the journal of the American Education Research Association Journal, *Educational Researcher*, under the revealing title ‘Educational research in an era of paradigm proliferation: what’s a journal editor to do?’, its then editor wrote: “Ours is a field characterised by paradigm proliferation and, consequently, the sort of field in

which there is little consensus about what research and scholarship are and what research reporting and scholarship should look like” (Donmoyer 1996, p. 19).

From Disciplines to Post-disciplinarity?

The developments I have described do indeed challenge the internal coherence of what were once presented as more or less monolithic disciplines; they challenge the exclusive role of the four foundation disciplines; and they challenge their individual sufficiency. These challenges have encouraged some, perhaps, to think that neither the idea of disciplines, nor even that of discipline, has any continuing function in the discourse of educational enquiry – that we live in a ‘post-disciplinary’ world. I shall, however, argue that these developments do not thus far necessarily challenge the requirement for such research to be ‘systematic and sustained’; to have its own means (methods?) to assist us in examining ideas which are put forward and judging what confidence to place in them – to be disciplined.

The literature on post-disciplinarity in the humanities and social sciences offers different messages on the place of disciplines or discipline in contemporary research. Some sources appear to use reference to multi-disciplinarity, inter-disciplinarity and postdisciplinarity interchangeably, though, as Menand rightly observes, “Interdisciplinarity is the institutional ratification of the logic of disciplinarity. The very term implies respect for the discrete perspectives of different disciplines. You can’t have interdisciplinarity, or multidisciplinarity, unless you have disciplines. . . This is not the same phenomenon as postdisciplinarity” (Menand 2001, p. 11).

Other sources are at pains to insist that the discourse of post-disciplinarity is consistent with continuing respect for the discipline of the discipline. The project is rather to add to what discipline-based enquiry can offer than to replace it. In an editorial introducing the journal, *Human Affairs: A Postdisciplinary Journal for Humanities and Social Sciences*, Višňovský and Bianchi explained: “Postdisciplinarity in our understanding does not mean that traditional disciplines have disappeared or indeed should disappear, but rather that they are changing and should change in order to solve complex issues of human affairs. It is not sufficient to approach such complex issues from any single discipline” (Višňovský and Bianchi 2002, p. 2). Giroux was at pains to stress that, “At issue here is neither ignoring the boundaries of discipline based knowledge nor simply fusing different disciplines, but creating theoretical paradigms, questions and knowledge that cannot be taken up within the policed boundaries of the existing disciplines” (Giroux 1997, p. xii). Similarly, “The problem . . . is how to construe and resituate the disciplines in a way that removes their effect as unnecessarily constraining foundational structures, while retaining the

² The full data set for these Research Assessment Exercise submissions is available on www.hefce.ac.uk/rae and provides a fascinating insight into the diversity of practice in educational research in the UK. A further assessment was conducted in 2008, but this did not require scholars to give a particular designation to the genre of research they submitted.

vitality of inquiry within them, so that the pursuit of knowledge is expanded, and the range of possibilities for what constitutes legitimate intellectual activity is broadened” (Mourad 1997, p. 86; see also Smith 2003).

Some, however, seem bent on the destruction of the disciplinary structure of academic life. When Michael Crow became President of Arizona State University he declared in his inaugural policy paper ‘A New American University: The New Gold Standard’ that: “Knowledge does not fall within strict disciplinary categories. . . The New American University encourages teaching and research that is interdisciplinary, multidisciplinary, transdisciplinary and postdisciplinary, leading, where appropriate, to a convergence of the disciplines, an approach that might more accurately be described as intellectual fusion” (Crow 2002, p. 2). (Compare the mission statement of the Lancaster University Institute for Advanced Studies at www.lancaster.ac.uk/ias/about/mission.htm.)

At the risk of oversimplification it seems to me that the discourse of ‘post-disciplinarity’ has a number of targets for critique or attack, and there are a number of these which I would not seek to defend. I am happy to acknowledge, for example, that the organisation of academic institutions into strongly bounded discipline based departments can be an obstacle to fluid and imaginative intellectual endeavour, though most of the organisational alternatives have their problems too. Even when a university such as my own institution, the University of East Anglia, is founded on an organisational principle of interdisciplinarity, the interdisciplinary units themselves tended to establish new barriers to academic collaboration (e.g. between historians in the School of English and American Studies and those in European Studies) as well as new opportunities for collaboration (for example, between historians, literary scholars and political theorists drawn together in European Studies).

I acknowledge, similarly, that the containment of research programmes within disciplinary boundaries, especially in fields such as education, which requires multiple approaches, is unhelpful.

Thus the view that any particular disciplinary structures are in some way ‘essential’ or ahistorical and unchanging is clearly unsustainable. Any historical perspective on the development of human understanding can only confirm an evolutionary picture of their development. Phenix emphasised that: “the concept of disciplines as species of knowledge is to be understood dynamically. The disciplines are not an array of fixed traditional ways of knowing that have been ordained at some special creation. They are structures of enquiry and understanding that emerge out of the continuous process of epistemic development” (Phenix 1964, p. 49). The practice of one community of enquiry may become increasingly contested from within; distinctions within disciplinary frameworks become clearer and more significant; methods and methodologies more refined and new conversational communities established.

This view is also compatible with the idea that discipline and rule governed systems may emerge from practices of enquiry in which they are by no means clearly defined – Schön’s ‘swampy lowland’ of research and practice (Schön 1983, p. 42). Rule governed systems emerge out of research practice as well as being brought to it. Appignanesi and Garratt describe, for example, their experience of ‘working without rules in order to find out the rules of what you’ve done’ (Appignanesi and Garratt 1995, p. 50). In *The Rise of the Network Society*, Manuel Castells writes of ‘the self-organising character of nature and society’ but adds: “Not that there are no rules, but rules are created, and changed, in a relentless process of deliberate actions and unique interactions” (Castells 2000, p. 74). My only qualification to the literature that describes the evolutionary character of epistemic communities is to warn that one can underestimate the continuities in these communities as well as their capacity for change (see Toulmin 1972). Moreover, even if the boundaries between, for example, what is the case and what ought to be the case, or between a religious and scientific account of creation are vigorously contested, such fundamentally significant categories of thought are not trivially to be dispensed with.

Finally, I share the view in some of the literature that to maintain that particular disciplinary structures are in some way reflections of the way reality is ordered is mistaken: rather they play a central role in the way in which we order our experience of reality or order reality itself.

Here I need to return to the distinction with which I introduced this chapter. It is not the disciplines as forms of academic organisation that I want to protect (though such organisation just may prove contingently important) but the discipline that they provide to intellectual enquiry. The notion of post-disciplinarity in educational research worries me in so far as it suggests that educational research cannot any longer be thought of as having any discipline. It is worrying because the loss of ‘discipline’ has two huge consequences. The first is that it totally undermines the basis of the special claim of educational research on our or anyone else’s attention; the second is that it renders meaningful conversation within epistemic communities – communities of arguers – impossible. Let me explain these two consequences more fully.

In Defence of Discipline – and Hence of Disciplines

The reason why we might give special attention to research – and urge others to do likewise – lies, on this view, in its claims: (i) to be based on sustained enquiry, (ii) to be enquiry characterised by the qualities of care and thoroughness contained in the every day sense of the systematic, and (iii) in its claims to be systematic in this slightly more technical sense of a rule governed system of enquiry. Discipline may

of course be applied more or less rigorously or vigorously. On the whole in academic circles propositions are seen to be more deserving of our belief to the extent that they are derived from enquiries which have been conducted with the greatest of rigour. So there is a connection between these considerations of enquiry as systematic, disciplined and rigorous and considerations to do with the quality of the research (though this does not mean that these are the only relevant criteria of quality).

The argument goes further however. For though research may require periods of isolated and individual study, it rests essentially on and in communities of enquirers, and such communities owe their identity to ‘commonly understood norms of enquiry’ (Shulman 1999, p. 164), a shared discourse, shared discipline, shared ‘systematics’. As Hunt argues, “the discipline of a discipline, by which I mean the rules of conduct governing argument within a discipline, does have a worthy function. Such rules make a community of arguers possible” (Hunt 1991, p. 104). The conditions for both the production and validation of research require communities of arguers, enquirers and critics – and a condition for the possibility of such communities of arguers is their sharing in a common language and their shared recognition and reference to some common rules of (in this case) intellectual and creative behaviour. Popkewitz emphasises the importance of these rules, not only in allowing communication and argument but also in developing ‘standards of enquiry’: “Research exists within communities of discourse which maintain and develop standards of enquiry. . . . Scientific communities involve commitments to certain lines of reasoning and premises for certifying knowledge. Each scientific field has particular constellations of questions, methods and procedures. These constellations provide shared ways of “seeing” the world, of working, of testing each others’ beliefs” (Popkewitz 1984, pp. 2–3).

The rules that I refer to and the intellectual, moral and institutional props which maintain them, constitute the discipline of the discipline, of the tradition of thought and representation with which they are associated. It is in this sense that I suggest that discipline is a *sine qua non* of research. ‘Disciplines,’ argues Lenoir with perhaps surprising lack of qualification in a sociological analysis, “are *essential* structures for systematising, organizing, and embodying the social and institutional practices upon which both coherent discourse and legitimate exercise of power depend” (Lenoir 1993, p. 73, my italics).

Research as a Rule-Governed Activity

It is a common feature of human rule governed practices that the rules are inexplicit, uncodified, tacitly understood. There is no rule book. Epistemologically functional rules (for

example, governing the relationship between specific cases and general theories) may easily get blurred with social conventions attached to a discipline (for example, regarding the use or non use of the first person in research reports). They tend to become more explicit when they are transgressed and critics point to the transgression. Eisner argued that: “When research methods are stable and canonized, the rules of the game are relatively clear. With new games, new rules” (Eisner 1993, p. 8). I tend to think that it works almost the other way round. The more firmly established a discipline the less explicit is people’s awareness of its rules. It is in the formation and development of new patterns of enquiry that people are especially aware of what is distinctive about it. It goes with my acknowledgement of the diversity of the intellectual resources which are today brought to the field of educational research that there are some significantly different rule governed systems in play. But let me at least illustrate the sort of rules which I have in mind, i.e. the kind of rules which shape the shared meaning and understanding which underpins research enquiry and its claims on our credibility.

1. *Rules which link the methods appropriate to the research task or conclusion to particular ontologies and epistemologies and hence shape the character of the truth claims* – so for example, someone who employed or offered three case studies as an attempt to answer a question about the *scale* of pupil disaffection in a given country would have made a kind of category mistake. Equally, someone offering a set of statistical tables in answer to a question about students’ *experience* of disaffection may (perhaps less obviously) have done the same.
2. *Rules which shape the way in which appropriate inferences can be drawn from the evidence or indicate the impossibility of such inferences.* Part of what defines a disciplined form of enquiry are the rules which govern the movement (or lack of it) between evidence/data and analysis, generalization, theory building. Examples would include the level of probability one could extract from an analysis of statistical correlations or the kind of movement one might make (or not make) from an individual case study to, for example, grounded theory or general policy.
3. *Rules which indicate what are the analytic and explanatory concepts appropriate to the research task and evidence* – understanding (and reflecting in one’s research) for example, an appropriate perspective on the ways in which questions to do with how certain educational goods are distributed; questions of whether or not such distribution is fair; questions to do with the role of capitalism in shaping this distribution; and questions of God’s will with respect to such distribution; may or may not be distinguished and inter-related. This is not to suppose that these

questions are simply resolved or resolvable: it is rather to make the point that part of the discipline of educational enquiry and part of what constitutes the shared understanding of different elements within that community consists in either having a view of this relationship or in sharing a language in which different views of this relationship can be intelligently explored.

Schwab drew these three types of rules together into what he referred to as the ‘syntactical structure’ of each discipline:

There is, then, the problem of determining for each discipline what it does by way of discovery and proof, what criteria it uses for measuring the quality of its data, how strictly it can apply its canons of evidence, and, in general, to determine the pathway by which the discipline moves from its raw data to its conclusion. This cluster of problems I shall call the problem of the *syntactical structure* of each discipline.

(Schwab 1964, p. 11)

It is the elements of this ‘syntactical structure’ which provide the rules or systematic nature – the discipline – of a discipline. In principle at least, it is the discipline in research which renders its outcomes especially worthy of our attention and credulity.

This last claim is especially important. The rules which go at least partly to constitute a discipline have a purpose, which is to contribute to the greater illumination and understanding of different aspects of our experience and our world. Phenix (1964) asks: “How ... can we be sure that the concept of a discipline is definite and significant enough to serve as a basis for the organization of knowledge? The answer,” says Phenix, “is empirical and pragmatic: disciplines prove themselves by their productiveness. They are the visible evidence of ways of thinking that have proven fruitful. They have arisen by the use of concepts and methods that have generative power” (p. 48).

As Phenix suggests, such rule-governed systems are not necessarily obstacles to innovation or creativity. Popkewitz (1984) stresses the paradoxical way in which these rule governed systems provide, nevertheless, the conditions for challenge, creativity and dissent: “Science exists in the preparedness of individuals to think up, explore and criticise new concepts, techniques of representation, and arguments... While it may seem paradoxical, the procedures, norms and interactions of the scientific community maintain a form of anarchy which encourages individual creativity” (pp. 3 and 6).

Discipline as an Obstacle to Enquiry?

This pragmatic principle of whether or not particular rule governed demands on a conversational community serve their epistemological purpose is a critical one. Rules, of course, both *open up* possibilities, for example, enabling the social processes that produce meaning, and *close* them

down, for example by institutionalising and protecting certain frameworks of understanding (‘discourses’?) and disallowing discursive forms which do not conform but which may nevertheless have the potential to reveal something interesting. Foucault (1982) writes of discourse as “a stumbling block, a point of resistance and a starting point for an opposing strategy” (p. 101). Stephen Ball (1990) explains: “Discourses constrain the possibilities of thought. They order and combine words in particular ways and exclude or displace other combinations. However, in so far as discourses are constituted by exclusions as well as inclusions, by what cannot be said as well as what can be said, they stand in antagonistic relations to other discourses, other possibilities of meaning, other claims, rights and positions” (p. 2).

The notion of ‘discourse’ that is employed here is, perhaps, a more substantive one than ‘discipline’ as I am employing it. I have in mind a system which is primarily procedural, methodological, and which frames the form of an enquiry rather than its content. ‘Discourse’ usually indicates something more heavily ideological characterised by theories and concepts which come to frame how people think about, for example, educational practice – notions like ‘educationally disadvantaged’, ‘special needs’, ‘giftedness’, ‘marketisation’, ‘inclusive education’, ‘under achievement’ and their attendant ideological and theoretical baggage. In so far as it is part of the neo-Foucauldian project to examine critically the genealogy of these ideas, the power relations which they serve and the subtle ways in which they support, for example, docility and self policing compliance under particular regimes, then this presents no threat to the notion of discipline as I have articulated it. Indeed this critical activity might, I assume, require its own discipline if it is to be conducted rigorously and successfully. ‘Discourse analysis’ has its own place among the range of contemporary disciplined practices in social science and, more narrowly, educational research, but it occupies, perhaps a special place in providing a common discipline to all such research in the form of a requirement for self critical alertness to the ways in which language is setting constraints on the possibilities of enquiry.

No-one imagines the disciplined pursuit of knowledge and understanding to be entirely free from entanglement with structures designed or developed to maintain and legitimate certain orders of power. This is precisely why its more sophisticated practitioners seek to operate under conditions which reduce these influences to a minimum, for example by defending the autonomy of research institutions against political interference; or fighting off institutional attempts to suppress research which might be damaging to the interests of the institution itself; by submitting to ethical codes which govern their rights in relation to the powerful and their obligations in their relations with the weak; by submitting to methodological and epistemological requirements which force critique of

their taken-for-granted assumptions, expose the ideological underpinnings of their work, and enable non-participants to challenge structural bias in the enquiry or in its conclusions. Again, part of the discipline that runs across all forms of educational enquiry is a commitment to these ethical and political requirements.

In his classic study of the inter-relationships between the social and epistemological practices of ‘academic tribes’ Becher (1989) argues – and evidences on the basis of his empirical work – the claim that “the ways in which particular groups of academics organise their professional lives are intimately related to the intellectual tasks on which they are engaged. In practice,” he acknowledges, “the two would seem to be inseparably intertwined; but in attempting to explore the characteristic features of the relationship it is necessary to separate the first analytically from the second” (p. 1). Importantly he goes on to describe the way in which epistemological considerations come to drive social and cultural relationships rather than vice versa: “It is crucial to my argument that, once such a field (of enquiry) becomes identified in terms of certain characteristics . . . a whole set of properties inherent in that identification come into play – properties which can profoundly affect the way of life of those engaged in the exploration of the field. *The cultural consequences in these instances have to be seen as closely derived from epistemological considerations*” (ibid., p. 4, my italics).

One response to all this (and perhaps this is the Foucauldian response) is to say that any attempt to separate the epistemic from the political is in vain. Each attempt to escape from or find a position outside the power-knowledge nexus is doomed to fail. One perhaps rather waspish reply to this is to ask what, then, is the point of Foucault’s own writing and the intellectual industry that this itself has spawned. Is this not in some sense contributing to our illumination of the conditions under which we engage in our different discourses and of the limitations and dangers which lie in them? Foucault himself would suggest that this is the case: “Power-knowledge . . . is not for me the fundamental problem but an instrument allowing the analysis – in a way which seems to me to be the most exact – of the problem of the relationship between subject and games of truth” (from a 1988 interview cited by Marshall 1990, p. 23).

More sympathetic, however, is the reply that the relationship between intellectual enquiry in its ‘disciplined’ forms and structures of power is an interminable wrestling match. We can observe over time both: (i) challenge to our systems of enquiry by those observing the ways in which these become distorted by structures of power, and (ii) challenges to those systems of power and the constructions of the natural and social world they support by those vigorous in deploying forms of enquiry – enquiry which can illuminate both the operation of those ‘knowledge-power’ systems and the world over which they seek to exercise control. Of

course, this last possibility could be a complete conceit, but it is a conceit which stands alongside the possibility that I am alone in the universe or that all my thoughts and actions are pre-determined: it is equally intriguing but provides no basis for the way in which one might actually conduct one’s life or that small part of it which is occupied with educational enquiry and research.

Conclusion

In short I hope to have shown that discipline in some form is essential to any practice honoured as educational (or any other kind of) research. I have described how this principle becomes enshrined in different forms of systematic enquiry which we recognise in the academic community as ‘disciplines’. I have described the way in which the disciplines which have contributed to educational enquiry have grown in number as people have seized on the insights which might be provided by the research practices and theoretical insights of different parts of the academy; how they have become more finely differentiated, and how they have become hybridised and joined together in a sometimes bewildering variety of ways.

For any educational researcher, I suggest, the raw material enshrined in student and educators’ experience is likely to be the starting point and the focus for research. However, the tools of enquiry, the modes of presentation of such data and the theoretical and conceptual frameworks employed in its analysis and interpretation will be drawn from the historically and socially evolving traditions of these disciplines. The very diversity of disciplined forms of enquiry represented in the contemporary educational research community (and their constant expansion) is itself a significant protection against the hegemonous domination of any one of them – provided of course that the educational research community and the wider democratic community of educational stakeholders can resist heavy handed attempts to limit what will be counted as evidence in ‘evidence based’ educational policy to certain approved methods such as randomised controlled experiments, and to deny the wealth of *rigorous and disciplined educational enquiry* which that community now has at its disposal (see Bridges et al. 2008).

Acknowledgements This contribution draws on material previously published by the author in Bridges, D. (2006) ‘The disciplines and discipline of educational research’ in *Journal of Philosophy of Education*, 40(2), 259–272. Copyright author’s. See also Bridges (2003).

Note on Contributor

David Bridges is Professorial Fellow at the Faculty of Education in the University of Cambridge and Emeritus Professor at the University of East Anglia where he was

formerly Dean of the School of Education and then Pro Vice Chancellor. David is Honorary Vice President of the Philosophy of Education Society of Great Britain and a Council member of both the British and European Educational Research Associations. He has published extensively on the interface between philosophy and educational research, including his collection, *'Fiction written under oath?' essays in philosophy and educational research* (2003).

References

- Appignanesi R, Garratt C (1995) *Post-modernism for beginners*. Icon Books, Cambridge
- Bain A (1897) *Education as a science*. D. Appleton, New York
- Ball SJ (1990) *Introducing Monsieur Foucault*. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 1–8
- Becher T (1989) *Academic tribes and territories: intellectual enquiry and the culture of disciplines*. SRHE and the Open University Press, Milton Keynes
- Bengtsson J (2002) *The many identities of pedagogy as a challenge. A lifeworld ontological contribution to the discussion of the philosophy of the science of pedagogy*. Paper presented to the 8th Biennial conference of the international network of philosophers of education, Oslo, 8–11 Aug 2002
- Bridges D (2003) *'Fiction written under oath?': essays in philosophy and educational research*. Kluwer, Dordrecht
- Bridges D (2006) *The disciplines and discipline of educational research*. *J Philos Educ* 40(2):259–272
- Bridges D, Smeyers P, Smith, RD (2008) *Evidence-based policy: what evidence? What basis? Whose policy?* Supplementary issue of *J Philos Educ* 42(Suppl 1) (Also reissued in book form by Blackwell in 2009), pp 1–198
- Castells M (2000) *The rise of the network society*, vol 1, 2nd edn, *The rise of the network society*. Blackwell, Malden/Oxford
- Crow M (2002) *A New American University: the new gold standard*. Arizona State University at: www.asu.edu/president/library/whitepapers/designimperatives.doc
- DePaepe M (2001) *The practical and professional relevance of educational research and pedagogic knowledge from the perspective of history: reflections on the Belgian case against its international background*. Presented to the international seminar on the philosophy and history of the discipline of education: evaluation and evolution of the criteria for educational research, Catholic University of Leuven, 24–26 Oct 2001
- Donmoyer R (1996) *Educational research in an era of paradigm proliferation: what's a journal editor to do?* *Educ Res* 25(2):19–25
- Eisner E (1993) *Forms of understanding and the future of research*. *Educ Res* 22(7):5–11
- Elliott J (1991) *Action research for educational change*. Open University Press, Milton Keynes
- Foucault M (1982) *The subject and power*. In: Dreyfus HL, Rabinow P (eds) *Michel Foucault: beyond structuralism and hermeneutics*. Harvester Press, Brighton, pp 208–226
- Giroux H (1997) *Series forward*. In: Mourad RP (ed) *Postmodern philosophical critique and the pursuit of knowledge in higher education*. Bergin and Garvey, Westport Connecticut/London
- Hammer B (1988) *Om pedagogiska problem och forskningsmetoder*. In: Lindberg L, Berge B (eds) *Pedagogik som vetenskap – vetenskap som pedagogic*. Studentlitteratur, Lund, pp 32–39
- Hirst PH (1966) *Educational theory*. In: Tibble JW (ed) *The study of education*. Routledge & Kegan Paul, London, pp 29–58
- Hunt L (1991) *History as gesture; or the scandal of history*. In: Arac J, Johnston B (eds) *Consequences of theory*. John Hopkins University Press, Baltimore, pp 91–107
- Lancaster University Institute for Advanced Studies (2005 downloaded) *Mission of the Institute of Advanced Studies at: www.lancaster.ac.uk/ias/about/mission.htm*
- Lenoir T (1993) *The discipline of nature and the nature of disciplines*. In: Messer-Davidow E, Shumway DR (eds) *Knowledges: historical and critical studies of disciplinarity*. University Press of Virginia, Charlottesville, pp 70–102
- Levering B (2001) *From schools of thinking to genres of writing: new roles for philosophy of education*. Presented to the international seminar on the philosophy and history of the discipline of education: evaluation and evolution of the criteria for educational research, Catholic University of Leuven, 24–26 Oct 2001
- MacDonald B (1972/1987) *Evaluation and the control of education*. In: Murphy R, Torrance H (eds) *Evaluating education: issues and methods*. Open University Press, Milton Keynes, pp 36–48
- Marshall JD (1990) *Foucault and educational research*. In: Ball S (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 11–28
- Menand L (2001) *The marketplace of ideas*, Occasional paper no 49. American Council of Learned Societies, New York. http://archives.acls.org/op/49_Marketplace_of_Ideas.htm
- Mourad RP (1997) *Postmodern philosophical critique and the pursuit of knowledge in higher education*. Bergin & Garvey, Westport Connecticut/London
- Murphy R, Torrance H (eds) (1987) *Evaluating education: issues and methods*. Open University Press, Milton Keynes
- Parlett M, Hamilton D (1972/1987) *Evaluation as illumination: a new approach to the study of innovatory programmes*. In: Murphy R, Torrance H (eds) *Evaluating education: issues and methods*. Open University Press, Milton Keynes, pp 57–73
- Peters RS, White JP (1969) *The philosopher's contribution to educational research*. *Educ Phil Theory* 1(1):1–115
- Phenix P (1964) *The architectonics of knowledge*. In: Elam S (ed) *Education and the structure of knowledge*. Rand McNally, Chicago, pp 44–62
- Popkewitz TS (1984) *Paradigm and ideology in educational research: the social functions of the intellectual*. Falmer, London/New York
- Schön D (1983) *The reflective practitioner*. Basic Books, New York
- Schwab JJ (1964) *Problems, topics and issues*. In: Elam S (ed) *Education and the structure of knowledge*. Rand McNally, Chicago, pp 4–47
- Shulman L (1999) *Professing educational research*. In: Lageman E, Shulman L (eds) *Issues in educational research: problems and possibilities*. Jossey and Bass, San Francisco, pp 159–165
- Simons H (ed) (1980) *The science of the singular*. Centre for Applied Research in Education, Norwich
- Smith MJ (2003) *Producing and consuming knowledge: the relevance of the 'new production of knowledge debate' for disciplinary and transdisciplinary social science*. www.sppp.us/protected-essays/2003-SPEP-Smith.doc
- Stake RE (1995) *The art of case study research*. Sage, Thousand Oaks
- Stenhouse L (1975) *An introduction to curriculum research and development*. Heinemann, London
- Stenhouse L (1980) *What counts as research?* Unpublished mimeo, CARE archive. University of East Anglia, Norwich
- Tibble JW (ed) (1966) *The study of education*. Routledge & Kegan Paul, London
- Toulmin S (1972) *Human understanding*, vol 1. Clarendon, Oxford
- Višňnovský E, Bianchi G (2002) *Editorial, human affairs*, 12. <http://www.humanaffairs.sk/editorial.htm>

Peter Roberts

Abstract

In this response, Bridges' distinction between 'the disciplines' and 'disciplined enquiry' is seen as a helpful way of understanding the nature of educational research. The response focuses on the end of Bridges discussion, where it is suggested that there is an 'interminable wrestling match' between disciplined forms of intellectual enquiry and 'structures of power'. This piece considers who might be winning this match. It is argued that the prevailing 'structures of power' in many parts of the world have been neoliberal in orientation. New Zealand serves as a useful case study in assessing some of the consequences of neoliberal policies for research and researchers. The chapter concludes with brief comments on the possibilities for maintaining disciplined enquiry while quietly resisting elements of neoliberal reform in tertiary education and research.

Keywords

Discipline • Enquiry • Neoliberalism • New Zealand • Tertiary education

Introduction

It is a pleasure to respond to David Bridges' well argued chapter. He draws a distinction between 'the disciplines' and 'disciplined enquiry', making a strong case for a version of the latter in what is sometimes portrayed as a 'post-disciplinary' world. As Bridges points out, Education has not generally been regarded as a discipline in its own right; rather, it is, to use Paul Hirst's (1974) classic nomenclature, perhaps best conceived as a field of knowledge, informed by a range of disciplines. The most prominent of those disciplines over the past half century have been philosophy, history, sociology, and psychology. The traditions of educational enquiry established under these foundation disciplines have, Bridges shows, been characterised as much by their differences as their similarities, and the past few decades have also witnessed the emergence of interdisciplinary domains (such as curriculum

studies), the development of classroom action research, and an expansion in the range of research methodologies for understanding school experience. There is now an enormous array of educational research material, and this poses some significant challenges for anyone seeking to make sense of the field.

Bridges acknowledges that the disciplines have changed and evolved over time. He notes also, however, that proper recognition should be given to continuities in epistemic communities. Bridges expresses concern at one possible inference that might be drawn from that notion that we have entered a post-disciplinary world: this is the idea that "educational research cannot be thought of as having any discipline" (p. 35). Such a state of affairs is worrying because "it undermines the basis of the special claim of educational research on our or anyone else's attention" and "renders meaningful conversation within communities of arguers impossible" (p. 35). In defending 'discipline' in educational research – i.e., enquiry conducted in a sustained, rigorous, systematic manner – Bridges stresses that this is a shared process: one involving groups of researchers in rule-governed activities (where those rules will often be tacitly accepted rather than explicitly conveyed). Disciplines have

P. Roberts (✉)
College of Education, University of Canterbury,
Christchurch, New Zealand
e-mail: peter.roberts@canterbury.ac.nz

distinctive ‘syntactical structures’ – clusters of rules relating to methods, concepts and truth claims – that give them their discipline and thereby make them ‘worthy of our attention and credulity’. “The rules which go at least partly to constitute a discipline have a purpose”, Bridges maintains, and this is to “contribute to the greater illumination and understanding of different aspects of our experience and our world” (p. 37).

I find little with which to disagree in Bridges’ analysis. The last section of his chapter, however, where he considers the possibility that discipline might serve as an obstacle for enquiry, perhaps leaves greatest scope for further development and this is the task I want to begin in this response. Bridges comments briefly on the work of Foucault and the concept of ‘discourse’, before making the following observation:

No-one imagines the disciplined pursuit of knowledge and understanding to be entirely free from entanglement with structures designed or developed to maintain and legitimate certain orders of power. This is precisely why its more sophisticated practitioners seek to operate under conditions which reduce these influences to a minimum, for example by defending the autonomy of research institutions against political interference; or fighting off institutional attempts to suppress research which might be damaging to the interests of the institution itself; by submitting to ethical codes which govern their rights in relation to the powerful and their obligations in their relations with the weak; by submitting to methodological and epistemological requirements which force critique of their taken-for-granted assumptions, expose the ideological underpinnings of their work and enable non-participants to challenge structural bias in the enquiry or in its conclusions. Again, part of the discipline that runs across all forms of educational enquiry is a commitment to these ethical and political requirements (p. 37–38).

It was not necessary, given his purposes, for Bridges to elaborate in detail on the concept of power or the meaning of phrases such as ‘orders of power’ and ‘structures of power’. Plenty of attention has been paid to the notion of power – and its relation to knowledge and education – elsewhere (and in this volume, see Olssen (2013), and Hodgson (2013) in particular). The passage quoted above provides a helpful starting point, however, for considering the question of disciplines and disciplined enquiry in a slightly different light. Bridges observes, correctly in my view, that “the relationship between intellectual enquiry in its “disciplined” forms and structures of power is an interminable wrestling match” (p. 38). The question I shall focus on is this: Who is winning this match, and with consequences for educational research and researchers?

Structures of Power

Over the past three decades the prevailing ‘structures of power’ in many parts of the Western world have been neoliberal in orientation. There is no *one* neoliberalism and any

evaluation of the impact of neoliberal policies across the globe needs to consider carefully the differences between countries and contexts. There have also been significant changes in the application of neoliberal ideas over time, often evident within specific nations. New Zealand provides a good case in point. Once regarded as the welfare laboratory of the world, New Zealand became a model of rapid neoliberal reform. The election of the fourth Labour government in 1984 marked the beginning of a programme of economic restructuring that included the sale of state assets, the removal of tariffs and subsidies, and the adoption of corporate management practices in public institutions. With the National Party’s landslide election victory in 1990, policy attention turned to the social sector, with cuts to benefits, the introduction of market rents for state housing tenants, the reconstruction of hospitals as ‘Crown Health Enterprises’, and a heavy emphasis on ‘choice’ and ‘competition’ in tertiary education policy. Universities were expected to operate like businesses, with the Vice-Chancellor becoming the Chief Executive Officer, councils becoming reconfigured along ‘Board of Directors’ lines, and managerialist principles becoming cemented in the day-to-day running of institutions. ‘Performance’ and ‘accountability’ became key terms. Increasing sums of money were devoted to marketing, with each institution striving to promote its ‘brand’ of tertiary education over the competition. (See further, Codd 1993; Olssen 2001; Peters and Marshall 1996; Peters and Roberts 1999.)

The formation of a Labour-Alliance coalition government in 1999 saw the emergence of New Zealand’s version of ‘Third Way’ politics (see Codd 2001), with a softening of some of the harder social edges of neoliberal reform, the replacement of the rhetoric of choice with a discourse of shared nation building, and belated moves to reduce the proliferation of new tertiary education organisations and qualifications. By this stage, however, the language of neoliberalism had become deeply embedded in institutional consciousness. References to ‘inputs’, ‘outputs’, ‘markets’, ‘performance indicators’, and ‘end-users’ continued. In substantive terms as well, neoliberalism has been pushed in new directions over the past decade. The central motif in tertiary education policy under the Labour-led years of 1999–2008 was to advance New Zealand as a ‘knowledge society and economy’, but as has been argued elsewhere (e.g., Roberts and Peters 2008), it was very much the economic element of this push that became dominant. We do not yet have a robust, well-developed account of the knowledge *society* in New Zealand policy discourse, despite the apparent importance of this notion to the reform process. During this period, competition within and between tertiary education institutions has, if anything, become more marked and knowledge has been seen very much as a commodity: as something to be bought and sold, packaged and marketed, in the service of making New Zealand more competitive on the international economic

stage. The return to a National-led government in 2008 appeared unlikely to disrupt these trends.

Within such an environment, academic life has changed dramatically, with important consequences for both ‘disciplines’ and ‘discipline’, as Bridges defines these terms. One of the most significant developments in this respect is the Performance Based Research Fund (PBRF). The PBRF emerged from the work of the Tertiary Education Advisory Commission (TEAC), a body set up to review tertiary education shortly after the Labour-Alliance coalition government came into office. The TEAC commissioners surveyed performance-based research funding schemes elsewhere in the world, including the UK’s Research Assessment Exercise (RAE) as it was then known, and recommended a system based on the evaluation of individual evidence portfolios by peers in disciplinary clusters, combined with research degree completions and externally generated research income. The evidence portfolios comprised lists of nominated research ‘outputs’, together with sections on ‘peer esteem’ and ‘contribution to the research environment’. One crucial difference between the RAE and New Zealand’s PBRF is that the *individual academic* serves as the unit for analysis. The main grades are A, B, C and R, the first of these indicating world-class research of the highest calibre and the last intended to mean ‘insufficient for a C’ (but often interpreted as ‘research inactive’). ‘A’ grades have been valued very highly, as they are given only rarely. In the subject area Education, for example, fewer than 3 % of academics received an ‘A’ rating in the inaugural PBRF round of 2003.

The PBRF extends three of the core planks of neoliberal reform in tertiary education policy: competition, commodification and performativity. Universities are aware of how much is at stake in the PBRF process (millions of dollars for each institution, and with this, potentially losses or gains in dozens of academic staff positions). They have, accordingly, ploughed considerable resources into preparing for each assessment round. (The first exercise in 2003 was followed by a partial round in 2006 and the next full assessment is to occur in 2012.) The PBRF provides strong incentives for a more competitive tertiary environment, both within institutions and, particularly, between them. Research funding under the PBRF is a ‘zero sum game’, with each institution competing against the others to gain the biggest possible portion of a limited pie. The PBRF can also be seen as one among several policy initiatives in recent years to push the process of commodifying knowledge further than has previously been the case in universities (cf. Codd 2006). Knowledge in a PBRF environment is categorised as portions of information and these have an academic exchange value, both for institutions and for individual researchers who seek to ‘trade’ on their results in the assessment exercises. This process, whereby knowledge is reduced to information that can be bought and sold, has been

underway for some decades (see Lyotard 1984). Such trading takes place in promotions, appointments, attracting international students, winning scholarships and fellowships, and a host of other ways. Indeed, it is arguably not knowledge at all that is being measured in PBRF evaluations but *performance*. There is no requirement to demonstrate, directly, that one knows *anything* in submitting a PBRF portfolio. Provided academics can marshal the appropriate evidence, as judged by panels of their peers, to indicate appropriate performance for a given grade level, nothing more is asked of them. Much depends, therefore, on how individual academic capital is utilised in compiling an evidence portfolio. The PBRF systematises the process of research evaluation, with reductionist consequences for the way we view researchers and their work. Narrative accounts of research activities, conversational forms of assessment (e.g., interviews or discussions with colleagues or students), and even records such as CVs, are pushed to one side in the drive for greater evaluative efficiency. Performance, as determined by the PBRF, comes to *stand in* for more well rounded, nuanced and informative judgements of individuals and institutions (see further, Roberts 2006, 2007a).

In this context, the discipline of research becomes one not merely of upholding the highest possible standards of scholarly rigour but also of learning to play a certain kind of academic game. Neoliberalism rewards research *entrepreneurs* (Ozga 1998), but even if academics try to resist this trend they cannot avoid being affected by it. For the very existence of some disciplinary areas within institutions depends, in part, on their ability to succeed in market-like terms, attracting not only sufficient student interest but external grants, national and international ‘brand visibility’, and ‘added value’ in the repackaging of research materials for ‘end-users’ outside university environments. Immersion in the academic world is no longer seen as necessary or even desirable for appointment at the highest levels, as has been evident in the appointment of increasing numbers of Vice-Chancellors with backgrounds in the world of business. The battle here is not principally one between disciplines but over the place of academic knowledge *per se*. As Zygmunt Bauman (1988, 1993) has argued, intellectuals – including those in universities – have been regarded by many as increasingly *irrelevant* in the age of the market. This creates a crisis of legitimacy, as academics struggle to deal with the anxiety created by the devaluing of their forms of knowledge and knowing – their disciplines – in the face of competition from other media in late capitalist societies. Bauman suggests, however, that this need not lead to despair. If anything, the discipline to which Bridges refers becomes all the more important in such an age. Academics need no longer pretend that their ideas matter greatly to others; instead, they can satisfy themselves with fulfilling the more modest (but still crucial) role of teaching the rules of interpretation.

Conclusion

So, in the wrestling match between “intellectual enquiry in its “disciplined” forms and structures of power”, as this has been played out in New Zealand, neoliberal politics have dominated – but this does not mean there has been a complete victory. It is not that disciplined enquiry as described by Bridges has disappeared; to the contrary, it continues to grow and develop in new directions. Almost all who participate in this process, however, must do so in an environment where the ‘rules of engagement’ for academics have been reconfigured. There has never been a ‘pure’ space for academic work, altogether free of political influence, and we do well not to romanticise the university of the past. Equally, we should not ignore the more destructive features of the academic present. Among these is a devaluing of the kind of contribution that might be made to human understanding by the arts and humanities (cf. Bullen et al. 2004) and, more generally, a loss of respect for the place of critique in a democratic society (Roberts 2007b). Academics are, in Foucauldian terms, *disciplined* by the neoliberal restructuring of research activity, and come to monitor and regulate their activities, to varying degrees, in accordance with the requirements of the PBRF. Decisions about where to publish, who to supervise, where and how to seek funding to support research projects, and even what to investigate must, if academic survival is to be ensured, be made with the PBRF in mind.

Nonetheless, provided we are, as Bauman might say, appropriately modest in our aims – and the modesty here is of one form only – we can continue to make precisely the difference that matters most in the long run as far as the university is concerned: through the art of *teaching*, something only mentioned in passing in Bridges’ chapter, we pass on what we know, not just about subject matter (the ‘disciplines’) but about the multifaceted, difficult process of enquiry (‘discipline’). In Education this point has special significance, for our work is often with students who are, or will be, in positions where they influence many other lives (e.g., as school teachers or principals, or as tertiary educators, or as counsellors and social workers). Inculcating a love of enquiry for its own sake, as well as for its other many benefits, leaves a permanent mark on those who are educated. Developing ‘discipline’ in the second sense suggested by Bridges involves not just the learning of techniques for sound scholarly work but the formation of a certain kind of human being.

No matter how brutal the politics of neoliberalism may be, there are still spaces within universities for being quietly subversive in calling the structures that govern everyday life into question. In fact, in New Zealand universities are obliged under the Education Act 1989 (section 162) to fulfil a role as ‘critic and conscience of society’. This can take a number of forms, some of which are more visible and ‘disciplined’ than others. To foster, through teaching and supervision, intellectual dispositions such as curiosity, critical

reflection, thoroughness and care, intellectual humility, a willingness to listen and learn, and a searching, probing investigative frame of mind is itself a radical intervention in a neoliberal world. Disciplines, understood as organised forms of knowledge, will continue to change over the next few decades, and some will disappear altogether from university curricula. Learning the art of disciplined enquiry will remain a vital part of the domains of study that survive. Gaining recognition beyond the academy for the value of scholarly work will, in a market-driven world, be a much harder battle to win.

Note on Contributor

Peter Roberts is Professor of Education at the University of Canterbury in New Zealand. Prior to taking up his current appointment, he worked for 13 years at the University of Auckland and 7 years at the University of Waikato. His primary areas of scholarship are philosophy of education and educational policy studies. Professor Roberts has published widely in refereed journals. His latest book is *Paulo Freire in the twenty first Century: Education, Dialogue, and Transformation* (2010). He serves on the editorial or advisory panels of ten international journals and reviews for many others. He is the current Vice-President of the Philosophy of Education Society of Australasia and a past member of the Council of the Humanities Society of New Zealand. In 2010 he was a Canterbury Fellow at the University of Oxford.

References

- Bauman Z (1988) Is there a postmodern sociology? *Theor Cult Soc* 5:217–237
- Bauman Z (1993) The fall of the legislator. In: Docherty T (ed) *Postmodernism: a reader*. Harvester Wheatsheaf, London, pp 128–140
- Bullen E, Robb S, Kenway J (2004) “Creative destruction”: knowledge economy policy and the future of the arts and humanities in the academy. *J Educ Policy* 19(1):3–21
- Codd J (1993) Neo-liberal education policy and the ideology of choice. *Educ Philos Theory* 24(2):31–48
- Codd J (2001) The third way for tertiary education policy: TEAC and beyond. *New Zeal Annu Rev Educ* 10:31–57
- Codd J (2006) The performance-based research fund and the production and commodification of knowledge. In: Bakker L, Boston J, Campbell L, Smyth R (eds) *Evaluating the performance-based research fund: framing the debate*. Institute of Policy Studies, Victoria University of Wellington, Wellington, pp 215–230
- Hirst PH (1974) Liberal education and the nature of knowledge. In: *Knowledge and the curriculum*. Routledge & Kegan Paul, London, pp 30–53
- Hodgson N (2013) On understanding power and the subject of educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 233–235
- Lyotard J-F (1984) *The postmodern condition* (trans: Bennington G, Massumi B). University of Minnesota, Minneapolis (Original work published 1979)

- Olssen M (2001) *The neo-liberal appropriation of tertiary education policy in New Zealand: accountability, research and academic freedom*. New Zealand Association for Research in Education, Palmerston North
- Olssen M (2013) Framing and analysing educational research: a recent history of transactions from a Foucauldian perspective. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 215–228
- Ozga J (1998) The entrepreneurial researcher: re-formations of identity in the research marketplace. *Int Stud Sociol Educ* 8(2):143–153
- Peters M, Marshall J (1996) *Individualism and community: education and social policy in the postmodern condition*. Falmer, London
- Peters M, Roberts P (1999) *University futures and the politics of reform in New Zealand*. Dunmore Press, Palmerston North
- Roberts P (2006) Performativity, measurement and research: a critique of performance-based research funding in New Zealand. In: Ozga J, Popkewitz T, Seddon T (eds) *World yearbook of education 2006: education research and policy*. Routledge, London, pp 185–199
- Roberts P (2007a) Neoliberalism, performativity and research. *Int Rev Educ* 53(4):349–365
- Roberts P (2007b) Intellectuals, tertiary education and questions of difference. *Educ Philos Theory* 39(5):480–493
- Roberts P, Peters MA (2008) *Neoliberalism, higher education and research*. Sense, Rotterdam

Hugh Lauder

Abstract

This chapter raises fundamental problems with the idea that disciplines comprise our key epistemic categories. It argues that knowledge is comprised of our best theories at any given time and their relationship to disciplines is complex. However disciplines do provide a social context for the development and appraisal of theories. However, they are also distinguished by power structures which make any straightforward appraisal of what may constitute our best theories more difficult.

Keywords

Disciplines • Theories • Power • Appraisal • Lakatos

Introduction

My problem with leaving theories to ‘free float’ independently of disciplines is whether locating a field in its theories and the institutions is enough.

Michael Young 9/7/2010, private communication

Michael Young’s comment identifies a fundamental tension in how we understand the nature of disciplines in relation to research in education. Are disciplines epistemic and social entities, or do they act as a ‘support service’ for the development of our best theories, understood as the vehicles for our knowledge claims?

I welcome this opportunity to respond to the preceding two contributions because in their respective ways they provoke reflection on these two elements involved in the notion of academic disciplines: first, how they are understood with respect to epistemology, and as social communities that provide the necessary social conditions for enquiry. David Bridges (2013) has little to say about the former so I shall start by focusing on this element because what is said about the relationship of epistemology and academic disciplines will create the framework for our understanding of the

role of a discipline’s social community. Next, noting that Peter Roberts (2013) points to the fragility of such social communities when assaulted by a particular strand of neo-liberalism, my contribution reframes the analysis of this element on two fronts. First, as an insider/outsider from Aotearoa/New Zealand, in concluding the piece I offer a critical observation on the issues raised in Robert’s piece. But before then, I sketch out how theory generation and appraisal might be understood in ways that raise critical questions about the robustness and persistence of particular theories, including the resources and impetus for their development and contestation, within research in education.

Epistemology and Academic Disciplines

For analytic purposes we can distinguish between at least two positions regarding the relationship of epistemology to academic disciplines. The first, represented most recently by Michael Young (2008), suggests that disciplines are epistemic categories – that is, they generate testable knowledge claims. By this is meant that the disciplines don’t just ‘house’ theories, but are constitutive of them.

An alternative account and the one I shall argue for is that, following Haig (1987), in a post-empiricist world, knowledge comprises our best theories at any given time.

H. Lauder (✉)
Department of Education, University of Bath, Bath, UK
e-mail: h.lauder@bath.ac.uk

In this respect theories, as epistemic categories, are independent of disciplines. We can see this by considering that some of the work at the forefront of both natural and social sciences involves theories that transgress disciplinary boundaries. However, with Young (2008) I shall suggest that the social context provided by disciplines is necessary for the primary intellectual activities of developing, testing, receiving and appraising theories.¹

Of course there are many different ways of understanding theories so let me begin by sketching a Lakatosian (1971) account of well formed theories. For Lakatos, the heart of theory is the ‘hard core’ or metaphysical world view that acts as a heuristic in the development of testable theories. Around this hard core is a protective belt which points in two directions: it seeks to deflect attacks on it (negative heuristic) and to provide methodological rules and hints to develop explanations for anomalies that arise in the research programme or theory (positive heuristic) understood as having this structure. A progressive research programme, as Lakatos termed these theories, has two elements, one theoretical and one empirical. In relation to the former a theory or research programme is progressive if it can develop a theory, consistent with the hard core that can explain the anomalies that arise. The more the theory is extended the more theoretically progressive it is. It becomes empirically progressive when theoretical developments lead to the prediction of new phenomena or ‘facts’. For the social sciences such an emphasis on prediction will be rare and here the focus should be on explanatory power.

Bhaskar (1979) provides a helpful account of explanatory power in terms of explanatory breadth and depth. Breadth refers to the range of phenomena that can be explained by a theory, and depth as to whether a theory (for example, a version of Marxism) can explain other theories such as Peter Roberts’ description of neo-liberalism in New Zealand. Where one theory can explain the advent or revival of another, Bhaskar suggests we can explain the latter in terms of political interest.

Now, since the hard core of a theory delineates a particular world view which is mutually exclusive of other world views, consider the contrast between neo-liberal and neo-Marxist world views, the key intellectual tasks are to develop well formed theories and to appraise them by comparing theories or research programmes to see which is the most progressive.

My view is that these tasks are as applicable to the social sciences as they are the natural. Indeed, although Lakatos would have objected strongly to this argument, it seems that some of the most politically powerful theories in the social sciences are well formed theories in the Lakatosian sense: consider neo-liberalism and its relative neo-classical

economics (Hutchinson 1977), neo-Marxism (Harris 1979) Behaviourism (Mackenzie 1977) or school effectiveness research (Lauder et al. 1998). Note here that it is only the last of these which does not transgress boundaries.

The Criteria for Judging Theories

Perhaps the most difficult intellectual task is that of appraising theories. Firstly because, if we see theories as having a life cycle – they are born, develop and die, then the criteria by which we judge neophyte theories may be different from those more fully developed. Secondly, the theoretical and empirical criteria by which research programmes will be judged is a matter of debate. In part this is because research programmes tend to have distinctive ways of testing knowledge claims. For example, the criteria for testing Behaviourist hypotheses such as whether a rat in a maze can be trained (or ‘learn’) to run left rather than right will be quite different from the tests administered by a Piagetian cognitive psychologist. By the same token, the evidence by which neo-liberals may judge the degree of poverty suffered by populations may include whether they have consumption goods like colour televisions. In contrast, for neo-Marxists poverty will be seen as a function of capitalism and will be related to the degree of exploitation of those defined as in poverty.

One of the problems with Lakatos’ account is that he did not describe how nascent theories developed into well formed theories, although Haig (e.g., 1987, 1995, 2005) in a series of papers has provided just such an account. In addition, and particularly pertinent for this paper is that Lakatos did not develop a sociology of how some of the key issues in the development of a research programme are addressed. One is especially relevant in this context: it concerns an epistemological problem first raised by Quine (1951) that Lakatos understood: that theories are always underdetermined by the evidence. In other words, that neither in the natural or social sciences is it possible for evidence to demonstrate the ‘truth’ of a theory. Given the difficulties of accurate prediction in the social sciences, including the one ‘discipline’ that prides itself on prediction, neo-classical economics, as we know from what is being called ‘the great recession’, the difficulties posed by the under determination of theory by evidence raises questions about the role of the social structures of disciplines in the persistence of particular research programmes. How is it, that when the evidence base in the social sciences is not, typically, as strong as in some of the natural sciences that particular research programmes, such as neo-classical economics, persist? there are at least two possibilities. The first is that young researchers are trained into the language and orientations of the discipline. The second is that theories and their supporting disciplines in the social sciences, carry political perspectives. Bhaskar

¹ It should be stressed that Young and I are much closer together on this issue than we have previously been.

(1979) describes neo-classical economics as a praxiology, namely a way of guiding policy makers, while failing to challenge the fundamental tenets on which their policies are based. The same analysis might apply to school effectiveness research (Lauder et al. 1998).

Here there are two observations worthy of note. The first is that the world view in the hard core will determine (understood as limits and possibilities) the orientation taken towards economic, social and political issues as reflection on the neo-Marxist and neo-Liberal examples will make clear. However, it is also the case that in some 'disciplines' such as, for example, sociology of education, there is, at present, a disciplinary world view based on the concept of redemption (Lauder et al. 2004). Most but not all researchers in this area buy into the idea that by critiquing educational practices and institutions some form of liberation may eventuate. Redemption has no logical relation to the discipline as it is currently conceived, rather its relationship is one of presupposition and it acts as a heuristic and inspiration. The question is why is there a guiding world view in a subdiscipline like sociology of education rather than embedded within theories or research programmes? An answer is suggested by Bridges' concern with the plethora of theories and perspectives that have now crowded into education and certainly characterise the *sub*-discipline of sociology of education: namely that there are many neophyte theories that have not well developed hard cores. In this case it may be that redemption acts a form of life support mechanism until a theory is sufficiently mature to have a world view which is integral to it.

The second observation has to do with 'training' researchers which may include forms of identity formation and in some cases something akin to indoctrination (see Kuhn 1970). I am always struck when comments in seminars are prefaced with 'as a philosopher...' or 'as an economist...'. Well, this is certainly a form of identity construction but as a Quinean, we may look upon such statements with a degree of scepticism. When the Australasian Marxist philosophers took on the 'London School' inspired by Richard Peters and Paul Hirst with a devastating critique they also attacked the view of philosophy that was presupposed by the London School. It is significant that the majority of those Australasian philosophers also turned to social theory because they did not consider there was any difference between the work of philosophers and those of social theorists.

The Role of Disciplines in a Post-empiricist Account of Knowledge

What then is the role of disciplines in a post-empiricist account of knowledge? In a formal epistemological sense they are there to develop, test, appraise and receive theories. The latter may need a comment. There are two points here.

New theories always require reception and acceptance at whatever stage of a theory's life cycle they are at. This is particularly so when they have been imported from another area or discipline – that is when they have transgressed disciplinary boundaries.

In these respects they provide a critical community of, as Bridges would have it, 'arguers'. This suggests that the community has been trained in a set of theories, methods, ways of 'testing' theories, and of judging their respective merits. But as Kuhn (1970) also noted upon such theories are built the institutional infrastructures that constitute academic careers. Here power and influence are tied into the choice of theories that a discipline will entertain. This is true of both natural and social sciences and it links to Bourdieu's (1993) notion of interests, where he understands interests as the 'specific investment in the stakes' (p. 76) over which academics struggle. Interestingly he defines this investment as both the condition and product of the academic field. This is a sophisticated concept of interest because it suggests, contrary to a neo-classical economics view, that the notion of interests extends to the identity of both institutions and individuals, where interests may relate to careers but also to a belief in the theories that researchers have invested in. The stakes in this sense are high indeed because theoretical and career interests may obscure the promise of nascent theories unless those that have an investment in them are also politically astute. In the natural sciences prediction may be a key step towards the reception of a theory in ways which are not possible in the social sciences. Nevertheless given the expense relating to the 'kit' needed to test predictions in much of the natural sciences a clear path needs to be forged in terms of theory to bear the expense of testing, and that may also take political acumen with a small 'p'.

In a sense the social structures of disciplines and their politics are closely related to issues of epistemology, and this is probably more so in the social than the natural sciences. Nevertheless, this does not preclude rational and spirited debate as has been indicated here, there are epistemic criteria by which theories can be judged although indeed there may also be debate about these criteria. Firstly because data are always theory impregnated, that is one of the reasons for theories being undetermined by the evidence and the kind of data considered a 'test' for Behaviourists is likely to be different to that of socio-cultural theorists of learning; secondly, because values may also be seen as having a legitimate role to play in theory appraisal (Balarin 2008).

Not all theories aspire to being well formed in the Lakatosian sense. Nevertheless a discussion of theories with Lakatosian structures, which I take to be paradigmatic of the best social science theories, including those in education, may be one way of illuminating debate about the many theories, that as Bridges notes, have crowded into educational research and their relationship to disciplines.

Finally, let me say something about the situation in Aotearoa/New Zealand. A few years ago I gave a paper at an NZARE (New Zealand Association for Research in Education) conference. At the end a former student commented that 'I had given a blast from the past'. I was puzzled. He explained the kind of research I had undertaken was no longer on the agenda, the focus for funding had, by and large, become much more narrowly utilitarian. If this is true then indeed it would be a reflection of the way disciplines may be rendered close to extinction by a lack of funding and support.

Note on Contributor

Hugh Lauder is Professor of Education and Political Economy at the University of Bath. He specialise in the political economy of education and globalisation. His latest book with Phillip Brown and David Ashton is *The Global Auction: The Broken Promises of Education, Jobs and Income*, New York, Oxford University Press, 2011.

References

- Balarin M (2008) Post-structuralism, realism and the question of knowledge in education sociology: a Derridean critique of social realism in education. *Policy Futures Educ* 6(4):507–527
- Bhaskar R (1979) *The possibility of naturalism: a philosophical critique of the contemporary human sciences*. Harvester Press, Brighton
- Bourdieu P (1993) *Sociology in question* (trans: Nice R). London: Sage
- Bridges D (2013) The discipline(s) of educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 31–39
- Haig B (1987) Scientific problems and the conduct of research. *Educ Philos Theory* 19(2):22–32
- Haig B (1995) Grounded theory as scientific method. In: Neiman A (ed) *Philosophy of education 1995: current issues*. University of Illinois Press, Urbana, pp 281–290
- Haig B (2005) An abductive theory of scientific method. *Psychol Methods* 10(4):371–388
- Harris K (1979) *Education and knowledge: the structured misrepresentation of knowledge*. Routledge & Kegan Paul, London
- Hutchinson T (1977) *Knowledge and ignorance in economics*. Basil Blackwell, Oxford
- Kuhn T (1970) *The structure of scientific revolutions*, 2nd edn. University of Chicago Press, Chicago
- Lakatos I (1970) Falsification and the methodology of scientific research programmes. In: Lakatos I, Musgrave A (eds) *Criticism and the growth of knowledge: proceedings of the international colloquium in the philosophy of science*, London 1965. Cambridge University Press, Cambridge, pp 91–195
- Lauder H, Jamieson I, Wikeley F (1998) Models of effective schools: limits and possibilities. In: Slee R, Weiner G with Tomlinson S (eds) *School effectiveness for whom?* Falmer Press, London, pp 51–69
- Lauder H, Brown P, Halsey AH (2004) Sociology and political arithmetic: some principles of a new policy science. *Br J Sociol* 55(1):3–22
- Mackenzie B (1977) *Behaviourism and the limits of scientific method*. Routledge & Kegan Paul, London
- Quine W (1951) Two dogmas of empiricism. *Philos Rev* 60:20–43
- Roberts P (2013) Changing scholarly lives: neoliberalism, discipline(s) and educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 41–45
- Young M (2008) Bringing knowledge back. In: *from social constructivism to social realism in the sociology of education*. Routledge, London

Stefan Ramaekers

Abstract

In a science-based approach to educational research the pursuit of truth only emerges in the form of a quest for evidence or ‘what works’. This chapter elaborates the idea that educational research can hold a different relation to truth, c.q. a relation that takes seriously Hough’s observation that educational researchers and practitioners are beings ‘whose borders are indistinct, merging into the history of the culture that produced [us]’. It will be argued that educational research should conceive of itself as being concerned about precisely this condition if it is to be called *educational*. What is important in educational research is not what researchers have to say ‘about’ education ‘to’ practitioners. Instead, the educational researcher is someone who *makes* things *educational* instead of primarily, or only, researching about education. Likewise, what is important in educational practice is not what practitioners ‘learn from’ research ‘about’ education, but how this allows them to undergo transformation. This (re)introduction of the subjective, the (re)emphasizing of the researcher’s and the practitioner’s investment, does not signify an abdication of truth and knowledge, but a fuller acknowledgement of human involvement in understanding the world.

Keywords

Truth • Wittgenstein • Cavell • Transformation of existence • ‘What works’

Profession, by Isaac Asimov (1959), explores the dark side to an educational system that centrally assigns professions to those on the verge of their working lives. Taking place on ‘Education Day’, the process known as ‘taping’ downloads the required knowledge to individuals via a computer/brain interface. The taping is supposed to take account of the physical make-up and suitability of each brain for one profession or another, as well as the quota requirements for each profession. Every ‘Educated’ person becomes a ‘model’ after their assigned specialty – notwithstanding the occasional ‘updating’ of the programming tapes, and the presumption that this is how (every)one’s education is best achieved.

Rebelling against the judgement that his brain is unfit for any form of ‘Education’, (for which he is sent to what is called the House of the Feeble-Minded), and that education should proceed this way, later on in the tale we find the protagonist, George Platen, in conversation with Ingenescu, who identifies himself as – of all things – a social scientist:

George said, with sudden suspicion, “I thought you were a Historian.”

“So I am.”

“Just now you said you were a Social Scientist.”

Ingenescu broke into loud laughter and apologized for it when he could talk. “I’m sorry, young man, I shouldn’t laugh, and I wasn’t really laughing at you. I was laughing at Earth and its emphasis on physical science, and the practical segments of it at that. I’ll bet you can rattle off every subdivision of construction technology or mechanical engineering and yet you’re a blank on social science.”

“Well, then what *is* social science?”

(Asimov 1959, pp. 54–5)

S. Ramaekers (✉)
 Faculty of Psychology and Educational Sciences, University of Leuven,
 Leuven, Belgium
 e-mail: stefan.ramaekers@ped.kuleuven.be

*

It is not so much Ingenescu's admirable effort to explain thereafter what social science is that interests me in this chapter, but the observation that some 50 years later, George's question still cannot be put to rest at least as far as the educational sciences (or should we say, studies?) are concerned. Even worse, the hierarchy between what Asimov (or his character here, Ingenescu) opposes as physical science and social science has not changed, particularly given the scenario where the latter still seems to frame much of its research methodology (quantitative, experimental design, causal analysis) in the terms of the former. Even the recent outburst of so-called 'mixed methods' in the social sciences, which purportedly reconciles the qualitative and quantitative 'paradigms' and hence finally seems to be able to put a stop to fruitless attempts to trump one over the other, cuts no ice. For it is readily seen that the idea of mixed methods requires a conceptualisation of qualitative research as being a form of quantitative research with qualitative data, hence minimalizing or even neutralizing the interpretive nature of qualitative methods by subjecting it to standard demands of reliability and validity. Reflecting on how educational research has developed over the decades, Richard Smith perceptively asks: 'How might things look different if literary criticism, rather than physics, was our paradigm of knowledge? Or even if Darwin, rather than Newton, had been our image of the scientist?' (2008, p. 195).

A 2005 special issue of the journal *Educational Theory* – on (the possibility of) educational research as a science entitled *The Education Science Question: A Symposium* – illustrates the pervasiveness of concern about the demand that educational research be 'scientific'. The authors contributing to this symposium take issue with the U.S. National Research Council's report, *Scientific Research in Education* (2002), which is taken as seeking 'to reinstate experimental-quantitative methods as the "gold standard" of educational science' (Howe 2005, p. 236). This gold standard being, in the words of Biesta, 'randomized controlled field trials', and thus with a strong emphasis on 'causal analysis by means of experimental research' (2007, p. 3). At stake is (the hegemony of) a 'science-based educational research, and its close cousin, evidence-based practice' (Schwandt 2005, p. 285), or, as it has recently been conceptualised, the 'what works'-movement, or the 'what works'-way of thinking (for recent analyses and criticisms see, for example, Smeyers and Depaepe 2006; Biesta 2007; Bridges et al. 2008).

The attractiveness of this form of science-based educational research seems to lie in its offering no less than the prospect of objectivity, even the certainty of knowledge, and thus bringing the truth of the matter into the picture as an attainable ideal. This stands in contrast with the supposed subjectivity and uncertainty, and consequently arbitrariness

and relativism, of non-scientific approaches. Of course, secure foundations for belief and practice are very appealing in uncertain times. We do not want to educate our children on the basis of beliefs that could be false, or for which there is no solid evidence, do we? Education, so it is often heard in one or another version, 'is too important to allow it to be determined by unfounded opinion, whether of politicians, teachers, researchers or anyone else' (EBE Network's *Manifesto for Evidence-Based Education*, quoted in Biesta 2007, p. 4). What seems to be worrying here then, on a more existential level, is the charge that when researchers and policy-makers turn to enquiry which is merely 'subjective' and hence 'arbitrary', there is no longer a place for truth in the educational picture, and that this leaves educational policy and practice without foundation or direction.

Richard Smith brings attention to two characteristic features of modern philosophy that have played a rather conclusive role in determining the outlook of contemporary social science, and by extension, educational research. First, he points to the idea 'of research having an epistemological basis', implying 'that epistemology is to be foundational', whereby epistemology is conceived of as 'a traditional examination in terms of, for instance, justified true belief, or the distinction between knowing how and knowing that' (2008, p. 184). As Smith further points out, this goes hand in hand with empiricism and the assumption 'that the world is to be scientifically known by agents separate and distinct from it' (ibid.). Second, he draws attention to the modernist preoccupation with method, and with finding the right method, even 'a universal method for science' (ibid.) as exemplified by Francis Bacon and René Descartes (Smith's examples, ibid.; see also Smith 2006), such that truth can only be discovered by using the right method. As is well-known, for Descartes this was the mathematical method (cf. his ideal of the *mathesis universalis*), but as is also sufficiently clear from the history and the philosophy of science, the sciences did not follow Descartes on this, and took a more empirical turn, eventually leading to the empiricism Smith draws our attention to – the point nevertheless remaining that without method, nothing of scientific value can be found.

Many reactions to the imposition of a 'what works' agenda are concerned with drawing attention to the particularities of the complex interactions in the classroom that science-based research methods cannot provide. It is argued that when educational practice becomes defined and regulated by reference to a very narrow conception of what counts as evidence, something which goes to the heart of education is lost; it is almost as if the educational itself has been surgically removed from education. Next to the analyses and criticisms already referred to, examples multiply. Schwandt, for example, reminds his readers of what he calls 'the rough texture of educational practice', which far prior to 'an ability to implement evidence-based curricula' is

in need of ‘simultaneous attention to the particulars of the situation (that is, the particular student one is facing at this time and in these circumstances) and to a host of considerations having to do with values, interests, habits, beliefs, traditions, and so forth that make decisions about how best to educate (at least in a democracy) inveterately untidy, contested, corrigible, and case-specific’ (2005, p. 296). Oancea and Pring also draw attention to the particularities of the situation in their examination of the different kinds and strengths of evidence. Evidence, they argue, is not something given, but needs to be balanced and weighed, and the sources for such balancing and weighing ‘lie in the large scale accounts of interventions, in the understanding of social norms that shape personal interpretation, in the experience of the teacher whose judgment embraces the peculiarities of the situation and in the voices of the learner whose own distinctive interpretation of the classroom interactions gives particular meanings to the events, quite different from those of teacher and policy maker’ (2008, p. 33). For Biesta, evidence-based practice presupposes a particular role of causality and a ‘separation between the means and the ends’ of professional action (2007, p. 9), neither of which cannot be just assumed in the realm of education, for two reasons. With respect to the first, ‘the fact that education is not a process of physical interaction but a process of *symbolic* or *symbolically mediated* interaction’ (ibid., p. 8), and second, ‘the question as to whether particular interventions are *desirable*’ (ibid., p. 9). Ingenu, Asimov’s character, seems to have already implied similar things, when trying to explain to George what the object of social science is:

But people aren’t machines. The professionals in physical science work with machines. There is only a limited amount to know about a machine and the professionals know it all. Furthermore, all machines of a given sort are just about alike so that there is nothing to interest them in any given individual machine. But people, ah— They are so complex and so different one from another that a Social Scientist never knows all there is to know or even a good part of what there is to know. To understand his own specialty, he must always be ready to study people; particularly unusual specimens.

(Asimov 1959, p. 56)

It seems clear then that there is a dimension of education that sits uneasily with a ‘quest for truth’ as conceived within the so-called science-based approach to research as exemplified by the ‘what works’ movement. There is not much sense in asking whether values, interests and traditions (such as a child’s trust in her mother’s or father’s love for her, or her belief in God) are true or false in the sense indicated. Yet there is obviously a sense in which educational research can be conceived as providing a ‘true understanding’ of these values, interest, habits, traditions – in the sense of accurate insight into them. And there are different kinds of ways in which truth is or might be understood and

applied (for example, by way of ethnography or phenomenology). True understanding is needed, for example, to outline the part these values, interests, etc. play in particular social or educational settings. But this is to be distinguished from the ‘quest for truth’ as implicated in the current dominant research paradigm. By contrast, in the ‘rough texture’ of educational practice, the main point of judgment lies in categories such as appropriateness and inappropriateness, the just and the unjust, the good and the bad.¹

*

But what is this ‘quest for truth’? It seems obvious to say that educational research should pursue truth. In its most extreme version this would come down to the idea, succinctly summarized by Biesta, ‘that research will be able to give us “the truth”, that “the truth” can be translated into rules for action, and that the only thing practitioners need to do is to follow these rules without any further reflection on or consideration of the concrete situation they are in’ (2007, p. 11). I guess – I hope – it will be hard to find someone subscribing to such an extreme view. Nevertheless, no matter what account or view is proposed – extreme, moderate or weak – one might expect that in a Companion such as this the matter will be debated according to some ‘classical’, textbook-like questions analysing the standard definition of truth (S knows that p, if and only if: S believes that p; p is true; and S is justified in believing that p), such as ‘what, then, is truth?’ and ‘what is knowledge?’, in a way similar to the questions raised by the scholars referred to above (e.g. What is evidence? What exactly does ‘what works’ mean? What is explanation? . . .) I’m not going to ask these kind of questions here, but instead, start from a particular understanding of truth, and proceed from there.

I approach the issue of truth(s) in educational research through a Wittgensteinian conception of truth – a conception unthinkable, as I will explain drawing on Stanley Cavell, without an account of what is human to it, of how the human is implicated in truth. My focus then will not be on the truth(s) educational research has to offer us by means of some methodology ratified by the scientific community, but on the importance of what we (researchers as well as practitioners) accept as true, of what counts as true. What is important in educational research is not what researchers have to say ‘about’ education ‘to’ practitioners, but their relation to truth. In the same way, as I will try to explain, what is important in educational practice is not what practitioners ‘learn from’ research ‘about’ education, but how this allows them to undergo transformation. This (re)introduction of the subjective, the (re)emphasizing of the researcher’s and the practitioner’s investment, does not signify an abdication of truth and knowledge, but a fuller acknowledgement of human

¹ Cf. Cavell 2005, p. 120.

involvement in understanding the world. Moreover it enables us to see that the human relation to the world and others in it is ‘closer, or more intimate, than the ideas of believing and knowing are made to convey’ (Cavell 1996a, p. 257; see also Smith 2008).

If truth is something that is not sensibly conceivable without a reference to human involvement, then, in a sense, the dominant conception of educational research, with its focus on evidence and ‘what works’ (as briefly sketched above), does not seem to relate to truth. First, there does not seem to be a *concern* for truth. That is to say, truth seems to be, in the current conceptualizations of educational research, a non-issue in the sense that it is not put into question (or stronger: not even considered necessary to put into question) that what one is in pursuit of, is, truth, i.e. by delivering ‘what works’. Talk of results and outcomes has prevalence over any serious engagement with truth(s) to be pursued in educational research to the effect that this, in a sense, has made the concept of truth irrelevant. Second, the very understanding of educational research as a science-based approach set on evidence-based practice presupposes the familiar epistemological and ontological assumptions that construe a human being’s relation to the world as one of observer to observed, and hence of truth as something external to that human being. Third, those who seek to challenge the science-based what works approach arguing that such research cannot capture the culturally and socially situated, subjective, messy contingent reality of the educational context, continue to frame their research within a discourse of research design and methodology that does not involve a shift in relation to particular truths.

My claim here that educational research, in its dominant conceptualization, does not relate to truth is not to contest that what is delivered by educational research in the form of ‘what works’ is in some straightforward sense ‘not true’. Rather, I am emphasizing that educational research can hold a different relation to truth – a relation that takes into account the observation that as educational researchers and as practitioners we are beings ‘whose borders are indistinct, merging into the history of the culture that produced [us]’ (Hough 1997, p. 101) – and should conceive of itself as being concerned about precisely this condition if it is to be called *educational*. This will require a shift of focus – a shift from discovering something ‘out there’ to a particular kind of attention, from a focus on delivering research results to a conception of delivering as speaking in a rich sense of the word, from registering ‘what is’ to professing.²

²This is, as will be clear to some readers, not something new. Something like this has already been argued for drawing, for example, on Foucault’s concept of care for the self (for example, Simons et al. 2005; Standish 2002; Masschelein 2006). I’m merely approaching the same issue from a different direction.

*

The human involvement in truth, this intimacy, or closeness, other than knowing, is found in Wittgenstein’s idea of agreement in judgments. Wittgenstein defines truth in terms of human agreement:

‘So you are saying that human agreement decides what is true and false?’—It is what human beings say that is true and false; and they agree in the language they use. That is not agreement in opinions but in form of life.

If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgments.

(Wittgenstein 1953, ##241–242)

This is not to be understood as ‘mere human’ agreement (hence not real, or really true, or objective). Put otherwise, it is a misunderstanding of Wittgenstein to conceive of this as a kind of constructivism, or even as some kind of contractualism, which takes agreement as meaning agreement ‘about’ something, at the same time implying that what one agrees ‘about’ can be fairly easily altered. Wittgenstein means something else, when he says that human beings agree *in* forms of life, *in* judgments, as Cavell argues:

The idea of agreement here is not that of coming to or arriving at an agreement on a given occasion, but of being in agreement throughout, being in harmony, like pitches or tones, or clocks, or weighing scales, or columns of figures. That a group of human beings *stimmen* in their language *überein* says, so to speak, that they are mutually voiced with respect to it, mutually attuned top to bottom.

(Cavell 1979, p. 32)

Agreement is not a matter of convention, or of *mere* convention, for as Cavell puts this, ‘no current idea of “convention” could seem to do the work that words do’ (Cavell 1979, p. 31). Taking Wittgensteinian agreement to literally imply ‘convention’ suggests that people come together, decide on a bunch of issues, and then go their different ways, acting as they have agreed – as in having closed a contract. Rather, Cavell argues ‘agreement’ is used here to convey the nature of a human being’s initiation into a community. The force of this differentiates coming to agree about things in community from a Wittgensteinian entering into agreements ‘that were in effect before our participation in them’ (Cavell 1988, p. 40). It points to ‘a background of pervasive and systematic agreements among us, which we had not realized, or had not known we realize’ (Cavell 1979, p. 30). The normativity, the constitutive power, of these agreements should, therefore, not be underestimated. A group of individuals does not decide or construct what is normative. Rather, individuals grow into normativity.

What should not be confused is the difference between a community collectively sustaining normative practices and a collection of individuals constructing normative procedures. Wittgenstein speaks of this normativity as ‘the hardness of the soft’ (Wittgenstein 1961, p. 44e). By this he means to convey that what seems at the outset to be rather ‘soft’, i.e. merely

human agreements, as in cultural and social accretions, linguistic valuations, something which we can (supposedly) oppose to the hard data of biology, of genetic destiny,³ is in fact deeply constitutive of the way we see, think and feel about the world. Wittgensteinian agreements are, we could say, embodied. As agreements they are not articulated; rather, they show themselves in what we say and do, in how we speak and act, in how we feel. Cavell expresses this by suggesting that our human nature is culture (Cavell 1979, pp. 110–11).

Nietzsche expresses the embodiedness of one's inheritance thus: '... behind feelings there stand judgments and evaluations which we inherit in the form of feelings (inclinations, aversions)' (1982, #35). Being initiated into particular practices, as coming to enter into a totality of agreements in judgments, is acknowledging that valuations become part of us in the shape of feelings. Education as initiation is coming to feel in a particular way, it involves not so much in-corporation as perhaps rather something like a process of em-bodying.

The passivity implied here is simultaneously accompanied by a certain kind of activity. The idea that human beings grow into normativity can be expressed by saying that Wittgensteinian agreements are (already) accepted. This points to the indelible human investment in this agreement in judgments. The latter are collectively upheld by and in a particular community of competent language speakers. There is, then, an indispensable human contribution to Wittgensteinian agreements, not in the sense of 'something subjective' tainting (and hence removable from) the objective, or the true, or the real, but in the sense that if this human investment were cut off, there would no longer be something we could call objective, true or real. In terms of the standard definition of truth [S knows that p, if and only if: S believes that p; p is true; and S is justified in believing that p], whatever it is that S believes, p being true is a matter of (non-conventional) agreement in judgments. This is no different for adapted accounts, such as that offered by Cuypers, which 'invoke[s] the Popperian notion of verisimilitude or truthlikeness in the analysis of knowledge' (Cuypers 2003, p. 177):

S fallibly knows that h, if and only if:

1. S believes that h is truthlike
2. h is truthlike, and
3. S is justified in believing (i.e. has good reasons for claiming) that h is more truthlike than its rivals on available evidence.

What is 'truthlike', or counts as 'available evidence', falls under the Wittgensteinian account of truth or falsity, i.e. being a matter of agreement in judgments. Hammersley's account provides a good example of this fallibilist, non-

foundationalist understanding of knowledge: 'We should', he argues, 'treat "knowledge" as referring to *what we take to be* beyond reasonable doubt' (2004, p. 70, emphasis added). The relevance of 'what we take to be', as opposed to talk of 'what is', should be clear. 'Evidence' does not cut deeper than agreement in this Wittgensteinian sense.

*

The following five examples of educational research now progressively illustrate a relation of human being to the world and to others that is more intimate or closer than can be captured in terms of 'belief' and 'knowledge', and thereby show that educational research can hold a different relation to truth.

First, we can consider Jane O'Dea's argument for a rapprochement between literature and research. She opposes 'empirical quantitative truth' with what she calls 'artistic literary truth' (1994, p. 162), arguing that this is the type of truth educational researchers, or at least those engaged in narrative research, should pursue. What is so particular to this artistic literary truth is that it conveys, O'Dea argues (quoting Weitz), 'limited and partial claims about certain phenomena' (O'Dea 1994, p. 163). 'Such partial claims', she continues, 'leave room for the irreducible complexity of the world while yet offering penetrating insights as to our experience of it' (ibid.). The kind of claims O'Dea is referring to are encountered when we read novels. These are the claims, O'Dea says, 'that strike us as startlingly "true", strike us as accurate, compelling if incomplete renditions of common lived experiences' (1994, p. 164). That she puts 'true' between inverted commas is important. It indicates, I take it, that these claims are not true in the sense of backed up by overwhelming evidence, or truthlike in the Popperian sense, but are true in the sense that not understanding them, not grasping them, is tantamount to not understanding something important about the human condition.

The truth status of such claims is also connected to a particular kind of writing. When writing, novelists express the way they understand the world, the way they make sense of the world, or the world makes sense to them. In this sense, the novelist, with each stroke of her pen, puts herself at risk, or at least exposes herself, instead of cutting off her own subjectivity, as doing so would block a real understanding of the world. (I will come back to this later.) In as much as educational researchers are asked to do something similar to this – O'Dea connects the idea of artistic literary truth with a concept of authenticity as truthfulness and honesty – then this is clearly far removed from the contemporary obsession with research methodology within which the activity of doing research is made researcher-proof (see Smith 2003, p. 133). That this seems to abolish disinterested knowledge is not at issue here. As I understand O'Dea, her concern is not so much with an idea of educational research that cultivates the connection between disinterested knowledge and technology (i.e. offering techniques which work), as with the educational researcher

³ I am drawing on a passage from Sheridan Hough (1997, p. 13) here. Hough uses this line of argument on Nietzsche, but I find it applies equally well to Wittgenstein.

who tries to offer insights, tries to offer practitioners a way to probe their deepest concerns.

Secondly, Richard Smith can be regarded as taking this a step further, advocating what he calls ‘Romantic research’ in education (2008, p. 191) – for taking ‘Romanticism seriously as a form of research’ (p. 186) – and he does so explicitly to advance a form of research that can be ‘a live alternative to method-based research as it is commonly understood’ (p. 193). Smith presents Romantic educational research as an investigation of the human condition as it is inherently linked with education (in a broad sense of the word). In line with Romanticism understood as a critical response to modernity, the emphasis in ‘Romantic research’ lies on whatever offers itself as a new possibility and on the creative (versus the systematic) (cf. pp. 188–9). To illustrate this, Smith undertakes an ‘interpretation of a poem containing some characteristically Romantic themes’, William Wordsworth’s ‘The World is Too Much With Us’ (p. 189). Central to his interpretation is his taking the poem ‘as a piece of research’ (p. 190), which allows him to say that a poem can be like an investigation of the human condition, and thus that the text of the poem is the poet’s findings (ibid.). Though (rightfully) cautious about giving the impression of invoking some kind of criterion for establishing it, Smith argues that we can have confidence in a poem (in a poem’s investigation), or for that matter ‘in any particular imaginative text that appeals to our feelings’ (ibid.), and finds that confidence to lie whenever

we are moved by a sense of truthfulness to how things are, in a way that is not a matter of simply being intellectually moved, but moved by the truthfulness of what we read to our own experience[.] (pp. 190–1)

By arguing for ‘Romantic research’, then, Smith explicitly wishes to oppose the assumption that ‘the modernist, scientific – and systematic – way of thinking [...] is the single legitimate form of thinking, or indeed that there is just any one, hegemonic, kind of educational research’ (p. 192). He is concerned to stress that research is truly educational when offering insights that might help the reader ‘see something she has not seen before’ (p. 194). Smith suggests that this possibility also lies within, for example, novels and films (ibid.). Take, for example, the two poetry teachers in the film, *Dead Poets Society*: the teacher played by Robin Williams and the teacher who replaces him after he has been fired. The issue turns around how to read poetry. The latter teacher uses the reading method, following it line by line, step by step, as it is printed in the first chapter of the textbook – a reading method, I take it, which is approved by the scientific community (after all, it is printed in a college textbook), most likely has proven its merit (it makes ‘knowing poetry’ measurable on standardized tests), and which forms the kind of reliable answer teachers want to be guided by during the dangerous undertaking that is called the teaching of poetry. The other

teacher, played by Robin Williams, also starts by reading the first lines of the textbook, then, however, proclaims the method to be rubbish, asks his students to rip the chapter out of the book, and shifts the focus of reading poetry, we could say, from method to feeling, to sensibility, to the heart, to passion – and then exemplifies that by passionately talking about and reading poetry.

Is this a better approach? (In the film, of course it is. But that is not the point.) Actually, it is the wrong question, because it leads one to ask what the assessment outcomes are with this approach. And doubly so, for what has happened here is not primarily something that has to do with the ‘method’ of reading and being taught poetry and what evidence there is of its effectiveness. Robin Williams’ teacher has left the path of truth and established knowledge, so it seems, but he has done so not to embark upon a journey with ‘mere beliefs’, but to embark upon a journey of inspiration – and that, as seems to be forgotten, is also educational.

Thirdly, like O’Dea and Smith, Robert Stake and Dale Kerr also pursue the analogy between research and art, but this time through the example of the paintings of René Magritte. They draw on Magritte’s understanding of his paintings – not so much as expressing ideas but rather as having the power to create them – to suggest that ‘Research can be designed so that as much as its power to express conclusions is its power to stimulate thinking’ (Stake and Kerr 1995, p. 56). This is not an open pathway to relativism: rather it is an acknowledgement of the fact that research conclusions are inevitably interpreted in particular ways by particular practitioners. Instead of deploring this (and putting more and more effort into the making of teaching, teacher-proof), Stake and Kerr propose facing this challenge directly and therefore setting educational researchers the task of ‘restructuring [the forms of their research] with the service of meaning-makers in mind: the readers, the practitioners, the policy setters, the people’ (p. 60). In simple terms, educational practitioners do not just mechanically apply techniques based on research findings. Application of research findings involves all the sensitive attunements to a particular context similar to those a child has to appropriate for saying something is a ball, or is difficult, or joyful. And as with O’Dea, the interest here is not primarily ‘what is’ and its technological derivation ‘what works’, but, as Stake and Kerr put this, ‘what is worth pondering’ (p. 61). Shifting attention to this can be done in many ways. For Stake and Kerr, ‘The able researcher draws attention to expectations and assumptions, shocking the reader out of complacency’ (p. 57).

Fourthly, by way of which we can return to the opening of the chapter and the initial discussion, Bent Flyvbjerg (2001) explicitly contrasts the place and tasks of social science and its research with those of the natural sciences. In *Making Social Science Matter*, Flyvbjerg goes against the dominant tendency

to conceive social science as a science in the way of the natural sciences and reiterates the well-known idea that social science should occupy a place of its own,⁴ by trying to show that the current comparison between social and natural sciences in terms of epistemic qualities is misfiring, and that ‘the social sciences are strongest where the natural sciences are weakest’ (p. 3). For Flyvbjerg this is the place (or domain, or level) of ‘reflexive analysis and discussion of values and interests, which is the prerequisite for an enlightened political, economic, and cultural development in any society’ (ibid.). Flyvbjerg’s way into this is the Aristotelian notion of *phronesis*, a development and understanding of which will help him ‘restore social science to its classical position as a practical, intellectual activity aimed at clarifying the problems, risks, and possibilities we face as humans and societies, and at contributing to social and political practice’ (p. 4) – hence his penchant for the phrases ‘phronetic social science’ and ‘phronetic research’. That these differ from a search for unequivocally verified knowledge should be clear. Rather, phronetic research should develop answers to questions such as ‘Where are we going?’, ‘Is this desirable?’, and ‘What should be done?’ (see, for example, p. 61). Phronetic researches do not generate techniques that work, but, more modestly and more adapted to social context, they provide ‘input to the ongoing social dialogue about the problems and risks we face and how things may be done differently’ (see, for example, pp. 61 and 139). As with the other examples mentioned, we see here the same reflexive move being made, emphasising the relevance of the interests of the practitioner. As I understand Flyvbjerg, conclusions as to what has to be done, or ‘what works’, are not drawn by social researchers, nor do they make decisions. Such conclusions are drawn and such decisions made (that is, reliable answers are given) in and after the public debate that has (hopefully) been aroused, instigated by what the researcher has had to offer. In terms of educational research, the reliable answers that teachers and policy makers are (said to be) looking for are not (and cannot be) offered ready-to-hand by the educational researcher. Rather, what is offered is the possibility of dialogue; what is delivered is a contribution to dialogue and praxis; what is implied is that reliability is not a straightforward empirical matter.

Finally, we can note that the ‘discourse-based educational research’ proposed by Maggie MacLure seems to work along similar lines to both Flyvbjerg as well as the earlier examples: on the boundaries or margins of and between research, literature and reflexivity. MacLure’s focus is on the discourses employed in education and in educational research, and on how these discourses work. Discourse-based educational research ‘would set itself the work of

taking that which offers itself as commonsensical, obvious, natural, given or unquestionable, and trying to unravel it a bit – to open it up to further questioning’ (MacLure 2003, p. 9). For example, it appears to be the case that an appeal to the real is made when relevance is at issue, or stronger yet, in order to invoke relevance, hence creating an opposition to what is not real, or merely constructed, and hence not relevant. The interest of discourse-oriented educational research is not to determine what is ‘really real’, by, for instance, discerning what is real from what is merely constructed or rhetorical. Rather, MacLure argues, it ‘would be immensely interested in how appeals to “real teachers” and “real worlds” work as rhetorical power-plays that try to install some version of reality by disqualifying others’ (p. 12). As I have argued elsewhere (Ramaekers 2002), it is vital not to close one’s investigative gaze too soon, not to close one’s eyes to what is not sought by one’s investigative procedures. I tend to see such research as a form of consciousness-raising about the discourse used, and hence about the kind of reality evoked by using it. What it demands of the (educational) researcher can be expressed as an ability to adopt a certain distance towards – which is perhaps more aptly put as cultivating a certain kind of sensibility to – the discourses in which her research is couched.

MacLure draws our attention to, for example, ‘the demand . . . that research writing should be “lucid”, “readily understood”’, one should ‘keep to the correct length, renounce style, flourish, and so on’ (MacLure 2003, p. 114). For MacLure this demand is connected to a particular kind of understanding of language and of how it gives us access to the world. ‘We have become accustomed’, she argues, ‘to thinking of the supposedly plainer (puritanical) versions as closer to the truth, more innocent, or at least more appropriate for research purposes’ (p. 115). Going a little further we may well ask why categorisations of educational problems ‘work’, not least in the sense of giving those confronted with the problems some peace of mind. Undeniably, there is the feeling of being acknowledged in one’s personal suffering, but that is only one of the intricate ways in which categorisations and labels operate. For example, learning disabilities such as dyslexia or non-verbal learning disorder are not just discovered ‘out there’, but are intimately intertwined with a particular kind of society at a particular kind of developmental level, with particular needs and the particular demands it makes of its inhabitants. In this sense, these learning disabilities do a particular kind of work. Drawing attention to the kind of work they do could, for example, reveal that we live in a society that is not able to deal with failure. (This is not to deny the children’s suffering – undeniably that is real; on the contrary, their suffering is the very point here.)

*

The examples of educational research in the previous section (and similar such accounts) expose the sort of

⁴ Cf. Peter Winch’s (1958) *The Idea of a Social Science*, for the basic contours of this ‘place of its own’.

questions educational researchers and practitioners ask – or are nowadays strongly inclined to ask – as expressions of a longing for the redemption of their educational investments. What these accounts bring to the fore and the way in which this is done fits ill with any attempt at framing in terms of evidence and ‘what works’. Our attention is drawn to deeper questions concerning, for example, society’s expectations about education, and our own expectations and demands as parents, teachers, researchers. This also means that these examples of educational research exemplify a different relation to truth in the sense that what is emphasized is the question, what *counts as* true, as desirable, as good. Contrary to what this might suggest, this is not an open invitation for unbridled relativism, but brings into view the ethical embeddedness of educational practice, and brings educational research back into the kind of deliberation that Cavell sees as turning around the appropriate and the inappropriate, the just and the unjust, the good and the bad.

What is pivotal here is a different understanding of the educational researcher, and of the primordial task of the educational researcher. The educational researcher is someone who *makes* things *educational* instead of primarily, or only, researching on or about education.⁵ What the educational researcher does is not aptly captured by some idea of delivering research results. Or better yet, there is a kind of responsibility connected to doing *educational* research, or to being an *educational* researcher, that is only minimally captured by the idea of delivering research results. Rather, the kind of responsibility implied here has more to do with seeing educational research as profession, as a form of professing. Drawing on Derrida, Standish argues that ‘the idea of profession requires something tantamount to a pledge, to the freely accepted responsibility to profess the truth’ (2002, p. 15). In Derrida’s idiom the commitment to truth implied in the act of professing is expressed as an openness to what is called the event. As a way of illustrating this, Standish (helpfully) gives the example of literary studies – an example which, I find, can be applied to educational research, at least in the context in which I am discussing this here:

Concretely, in the case of literary studies, the work of the critic is not just a response to works of art but is itself a work, where work is something that adds somehow to the world and at the same time invokes new thoughts.

(Standish 2002, p. 16)

In an important sense, educational research is akin to what Standish describes here as literary studies: sometimes it opens perspectives unforeseen, sometimes it is a bit utopian, sometimes critical (in a perhaps ordinary sense of the word) – but it always invites one to think.

⁵ This particular phrasing was inspired by a paper by Ilse Geerincx (2008).

Crucially, in this kind of research work, that is, understood as a form of professing, we see echoes of our first example in that the educational researcher puts herself at stake, or put differently, exposes herself. To profess, as a form of speaking in a rich sense of the word, is to assume responsibility for the words one uses, and is accordingly a form of exposition, of exposing oneself (one’s self).⁶ For in the act of professing, the one professing gives expression to her understanding of the world, of oneself, and of others in the world; voices what *she* takes to be meaningful, true; and hence it entails risks, such as the risk of being misunderstood by others, of others being misunderstood by her, of not saying enough, or of saying too much. This is not necessarily to be taken as something negative. For one thing, it is precisely what is entailed in acknowledging the human involvement (cf. above) in understanding the world, and in what it means to express this understanding. Put more concretely, what it could mean is that educational research can perhaps be considered as the moment at which we – we, that is, as researchers as well as practitioners – are invited to investigate ourselves, or let ourselves be investigated. Educational research is, then, something that invites to ask the question ‘Where do we find ourselves?’⁷ – the answer to the question being an investigation of the borders of our being in this world, an investigation of how we are merged into the history of the culture that produced us (cf. above, quotation from Hough), or in a more Wittgensteinian idiom, of our agreements in judgments, our ‘conventions’, our culture’s criteria (cf. Cavell 1979, p. 125 example). This (re)turn to (what can be called) the existential level can be taken as an occasion to reorient ourselves as parents, or as teachers, or as researchers, and hence also the beginning of a reorientation of the community we take ourselves to be representatives of.⁸

⁶ Cavell addresses the theme of exposition in (for example), *Conditions handsome and unhandsome* (1990).

⁷ Emerson, quoted in Cavell 1996b, p. 66.

⁸ This kind of educational research has also been described, with reference to Foucault, by Simons et al. (2005). Educational research as critical research should, they argue, ‘no longer be related to a guarding, judging, legitimizing, monitoring, saving or securing position, but to an ‘experimental’ praxis and attitude which is not concerned with ‘legitimation’ [...] and with defining or defending a ‘position’, but with ‘experience’, with experience in the literal sense of ‘what is happening to us’ (p. 827). Understood in this way, educational research has to do with ‘a limit-attitude, an attitude of susceptibility to the limits of the present’ (ibid.). The critical researcher thus understood finds herself in what they call ‘an uncomfortable ex-position’ (ibid.) – uncomfortable because what is at stake in this kind of research is both the given order and one’s position in that order (cf. ibid., p. 828). In ways comparable to what I try to argue for here, the critical researcher, Simons et al. argue for, offers research of a kind that functions as an invitation – research that invites us to ‘offer insight, not at the epistemological level [...], but at the ethical or existential level, i.e. the level of how we relate to ourselves, to others, and the world’ (ibid., p. 829).

*

Towards the end of *Profession*, George is speaking to someone about learning through books and their discussion, rather than through the so-called education tapes that are run through someone's brain.

George said tensely, "Don't think this is a joke. Tapes are actually bad. They teach too much; they're too painless. A man who learns that way doesn't know how to learn any other way. He's frozen into whatever position he's been taped. Now if a person *weren't* given tapes but were forced to learn by hand, so to speak, from the start; why, then he'd get the habit of learning, and continue to learn. Isn't that reasonable? Once he has the habit well developed he can be given just a small amount of tape-knowledge, perhaps, to fill in gaps or fix details. Then he can make further progress on his own. [...]"

(Asimov 1959, p. 62)

The person he is speaking to is sceptical about all this, enquiring where one would get one's knowledge if not from tapes. George continues:

"From books. By studying [e.g.] the instruments themselves. By *thinking*."

"Books? How does one understand books without education?"

"Books are in words. Words can be understood for the most part. Specialized words can be explained by the technicians you already have."

On the one hand, there are Asimov's tapes, representing fixed procedures and ready-to-hand knowledge that freeze one into a position, and on the other, books, invoking the necessity to think, relying on the capacity for creative thought and coming up with new things. Educational research can be undertaken and understood as either. My burden throughout this chapter has clearly aligned with George's preference, in Asimov's allegorical description of the options for Education. In the same way as a reader has to *do* something with a book – that is, a book's meaning is not just there, ready-to-hand; rather, a book gets its full meaning only from a reader's engagement with it – educational research can be offered as something that invites us to probe for further meaning, and meaning-making. And in the same way as a book can change both the writer and the reader, educational research can change both researcher and practitioner. The kind of change involved is not to be understood as an increase in knowledge, or as an 'increase of learning'⁹ (hence, again, controllable, easily teachable, conveyable), but what could be called a 'transformation of existence'.¹⁰ It is not so much, in Masschelein's words, 'that we have more experience and more knowledge, but that we are changed, that we have become someone else, that we relate differently to the world and that we can no longer value what was before' (Masschelein 2006, p. 571). It is the sort of transformation

that is entailed in, for example, an answer to (or a thoughtful pause regarding) the question of what happens to us when we have understood those 'artistic literary truths' O'Dea speaks of, or what happens to us when we become aware of the kind of language or discourse that is used to communicate our understanding of the world to others. *Educational* research is having 'one's estimate of the worth of existence' (Cavell 2005, p. 121) – its truth, our truth – shaken.¹¹

Acknowledgements This chapter is a revised and elaborated version of arguments previously published in the *Journal of Philosophy of Education*. See Ramaekers 2006 – copyright, author's.

Note on Contributor

Stefan Ramaekers is Assistant Professor at the Centre for Philosophy of Education, Katholieke Universiteit Leuven. He teaches philosophy of education and qualitative/interpretative educational research methods. His primary research interests are scepticism in educational theory and practices, Nietzsche, Wittgenstein and Cavell, and the ways in which scepticism is implicated in the human condition. During recent years his research has concentrated on a critical investigation of the changing discourses of parenting (in collaboration with J. Suissa of the Institute of Education, University of London).

References

- Asimov I (1959) *Nine tomorrows*. Fawcett Crest, New York
- Biesta G (2007) Why "what works" won't work: evidence-based practice and the democratic deficit in educational research. *Educ Theory* 57(1):1–22
- Bridges D, Smeyers P, Smith R (eds) (2008) 'Evidence-based educational policy': what evidence? What basis? Whose policy? Wiley Blackwell, Oxford
- Cavell S (1979) *The claim of reason: Wittgenstein, skepticism, morality, and tragedy*. Oxford University Press, New York
- Cavell S (1988) *In quest of the ordinary: lines of skepticism and romanticism*. The University of Chicago Press, Chicago
- Cavell S (1990) *Conditions handsome and unhandsome: the constitution of Emersonian perfectionism*. The University of Chicago Press, Chicago
- Cavell S (1996a) *The ordinary as the uneventful*. In: Mulhall S (ed) *The Cavell reader*. Blackwell Publishers, Oxford, pp 253–259
- Cavell S (1996b) *Contesting tears: the Hollywood melodrama of the unknown woman*. The University of Chicago Press, Chicago
- Cavell S (2005) *Philosophy the day after tomorrow*. The Belknap Press of Harvard University Press, London
- Cuypers SE (2003) *The concept of truth in educational theory*. In: Smeyers P, Depaep M (eds) *Beyond empiricism: on criteria for educational research*. Leuven University Press, Leuven, pp 167–179
- Flyvbjerg B (2001) *Making social science matter: why social inquiry fails and how it can succeed again*. Cambridge University Press, Cambridge

⁹ Concept borrowed from Cavell 2005, p. 122.

¹⁰ *Ibid.*

¹¹ I would like to thank Naomi Hodgson for her close reading of an earlier version of this chapter, and Michel Salu for introducing me to the writings of Asimov.

- Geerincx I (2008) A portrait of the teacher-as-prostitute. Public as 'free for use'. Paper presented at the conference 'education as a matter of public concern', Centre for Philosophy of Education, Leuven, 28 Nov 2008
- Hammersley M (2004) Get real! A defense of realism. In: Piper H, Stronach I (eds) *Educational research: difference and diversity*. Ashgate, Aldershot, pp 59–78
- Hough S (1997) Nietzsche's noontide friend. The self as metaphorical double. The Pennsylvania State University Press, University Park
- Howe RK (2005) The education science question: a symposium. *Educ Theory* 55(3):235–243
- MacLure M (2003) *Discourse in educational and social research*. Open University Press, Buckingham
- Masschelein J (2006) Experience and the limits of governmentality. *Educ Philos Theory* 38(4):561–576
- National Research Council (2002) *Scientific research in education*. National Academy Press, Washington
- Nietzsche F (1982) *Daybreak: thoughts on the prejudices of morality* (trans: Hollingdale RJ). Cambridge University Press, Cambridge
- O'Dea J (1994) Pursuing truth in narrative research. *J Philos Educ* 28(2):161–171
- Oancea A, Pring R (2008) The importance of being thorough: on systematic accumulations of 'what works' in education research. *J Philos Educ* 42(Supplementary issue):15–39
- Ramaekers S (2002) Postmodernism: a 'sceptical' challenge in educational theory. *J Philos Educ* 36(4):629–651
- Ramaekers S (2006) No harm done: the implications for educational research of the rejection of truth. *J Philos Educ* 40(2):241–257
- Schwandt TA (2005) A diagnostic reading of scientifically based research for education. *Educ Theory* 55(3):285–305
- Simons M, Masschelein J, Quaghebeur K (2005) The ethos of critical research and the idea of a coming research community. *Educ Philos Theory* 37(6):817–832
- Smeyers P, Depaepe M (eds) (2006) *Educational research: why 'what works' doesn't work*. Springer, Dordrecht
- Smith R (2003) Research and revelation: what really works? In: Smeyers P, Depaepe M (eds) *Beyond empiricism: on criteria for educational research*. Leuven University Press, Leuven, pp 129–140
- Smith R (2006) As if by machinery: the levelling of educational research. *J Philos Educ* 40(2):51–62
- Smith R (2008) Proteus rising: re-imagining educational research. *J Philos Educ* 42(Supplementary issue):183–198
- Stake R, Kerr D (1995) René Magritte, constructivism, and the researcher as interpreter. *Educ Theory* 45(1):55–61
- Standish P (2002) Disciplining the profession: subjects subject to procedure. *Educ Philos Theory* 34(1):5–23
- Winch P (1958) *The idea of a social science and its relation to philosophy*. Routledge, London
- Wittgenstein L (1953) *Philosophische Untersuchungen [Philosophical investigations]* (trans: Anscombe GEM). Basil Blackwell, Oxford
- Wittgenstein L (1961) *Notebooks* (trans: Anscombe GEM). Basil Blackwell, Oxford, pp 1914–1916

Stijn Mus

Abstract

Ramaekers provides a strong argument to go beyond a ‘what works’ approach, pointing out that for educational research to be truly educational, a more engaged commitment to truth is essential. In this piece, I explore how we might conceive the truth of educational research in relation to our agreement in judgements, and thus, the implications of this work in helping transform our sense of responsiveness and responsibility as writers and readers of educational research. Elaborating on the conceptualisation of truth in terms of agreement in judgements, it is argued that educational research is constitutive rather than descriptive. Educational research redefined along these lines does not appear as a representation of reality, but as a cultural moment. Its task is to actively endow reality with meaning, stimulating its reader to become engaged in a discussion of what is worth pursuing, instigated by what the researcher provides. As such, educational research contributes to the permanent adaptation and transformation of our culture to the new demands of the present.

Keywords

Educational research • Agreement in judgements • Reader response • Imagination
• Practical judgement

Introduction

Stefan Ramaekers provides an account of educational research as answerable to a form of truthfulness which takes into account how humans are involved in its production and appraisal. He thereby provides a strong argument to go beyond a ‘what works’ approach, pointing out that for educational research to be truly educational, a more engaged commitment to truth – rather than to mere factuality – is essential. In this piece, I will not restate the necessity to pursue another kind of relationship to truth, as this is very eloquently argued by Ramaekers. Rather, expanding on his elaboration of agreement in judgements, I explore how we

might conceive the truth of educational research in relation to our agreement in judgements, and thus, the implications of his work in helping transform our sense of responsiveness and responsibility as writers and readers of educational research.

Starting Points: Human Involvement in Truth

Ramaekers emphasizes that “what is important in educational research is not what practitioners ‘learn from’ research ‘about’ education, but how this allows them to undergo transformation” (p. 51). He further argues that “this (re) introduction of the subjective, the (re)emphasizing of the researcher’s and the practitioner’s investment, does not signify an abdication of truth and knowledge, but a fuller acknowledgement of human involvement in understanding the world” (p. 54).

S. Mus (✉)
Department of the Foundations of Education, Ghent University,
Belgium
e-mail: stijn.mus@ugent.be

In order to substantiate his vision, Ramaekers draws on the work of Wittgenstein and Cavell to define truth in terms of *human agreement in forms of life*. Thus to start with, this requires acknowledging that our form of life constitutes the familiar background of the world we inhabit while at the same time determining its limits. For Ramaekers, agreement in this regard is not to be conceived as agreement in opinions, but, as in the words of Cavell, requires we focus attention on the “background of pervasive and systematic agreements among us, which we had not realized, or had not known we realize.” In addition, Ramaekers emphasizes that “the normativity, the constitutive power of these agreements should [...] not be underestimated” (p. 54). He goes on to state that, “As agreements they are not articulated, [...] they show themselves in what we say and do, in how we speak and act, in how we feel.” And finally, “valuations become part of us in the shape of feelings” (p. 55).

Thus Ramaekers is at great pains to emphasize the coercive force which emanates from our form of life, as well as its ingrainedness in human nature. Our form of life, shaping the way we speak, act and feel – and hence judge – is constitutive of who we are. For that reason, our agreement in judgements deserve to (or should) be taken into account in educational research, so as to acknowledge human involvement in producing and understanding our worlds.

While I do agree with most of Ramaekers’ account, in this response I will highlight a point which I think remains underexposed. His strong emphasis on the engrainedness of our agreement in judgements risks obscuring the fact that they remain *susceptible to change*, owing to their intersubjective nature (the ‘hardness of the soft’). For despite the fact that our form of life is coercive on us – indeed might at times be as coercive as physical laws – its alterability is, by the same token, an essential feature. And while his examples clearly bear witness to the susceptibility to change, on occasion Ramaekers seems to downplay this possibility for alteration; for example, when he states: “[...] it is a misunderstanding of Wittgenstein to conceive of this as a kind of constructivism, or even as some kind of contractualism, which takes agreement as meaning agreement ‘about’ something, at the same time implying that what one agrees ‘about’ can be fairly easily altered” (p. 54).

To be sure, I do not argue that our form of life can be altered fairly easily. On the contrary, there are aspects of our forms of life which are unlikely to shift. (This is especially the case for those aspects which are intertwined with our sensory apparatus, but it might also be the case for basal intuitions like the acceptance of the existence of a physical world independent of our mind.) Equally, as both the coercive and the alterable are essential characteristics of our normative practices, researchers might choose to emphasize either of them. Yet, this is not to say they are easily alterable, but their alterability remains part of what constitutes them.

What I emphasize then, is the necessity to acknowledge that our agreements in judgements *do* change. And moreover, that these changes are interconnected with changing social practices and language use.

Without this recognition, the whole idea of agreement in judgements risks functioning as a hedged form of foundationalism in educational research. This can be illustrated through reference to Hammersley’s (2004) understanding of knowledge as “referring to what we take to be beyond reasonable doubt” (p. 70).¹ Two words are of immediate cause for concern: “we” and “reasonable”. It is hard *not* to read them as suggesting that “what we think to be beyond reasonable doubt” *should* not be put in doubt. Applied as such, agreements in judgements move towards closure instead of providing the space called for by Ramaekers’ given examples of Richard Smith, and Stake and Kerr (p. 56). The challenge educational researchers face is precisely to expand the space of ‘what we take to be beyond reasonable doubt’, rather than to proclaim it a norm for truth in educational research. Indeed, what is most disturbing about the ‘what works’ approach is its unabashed negation of this faculty. By claiming the status of objectivity, it uplifts stipulative definitions to natural kinds, thereby foreclosing the option to reframe reality through creative rethinking.

Hammersley’s account then is a far cry from Derrida’s observation (as cited in Standish 2002, p. 16) that a commitment to truth requires an “openness to the event”. For Derrida, truth does not work towards closure but entails a permanent postponement of closure. Thus although I do agree that our agreement in judgements remains the starting point for truth in educational research, the truth-value of an account cannot be measured up against our form of life *in its present state*. Rather, there is a need to envisage educational research as a performative act which ultimately reverberates upon our form of life itself. As human culture is implicated in the production and testing of truth, cultural *production* – and I consider educational research to fall under this category – is implicated in truth too. Consequently, the challenge for the researcher is similar to the one Standish attributes to the literary critic: “[her work] is not just a response to a work, but is itself a work [that] adds something to the world and at the same time evokes new thoughts” (ibid.). The researcher thus becomes a constructivist, not in the sense that she constructs reality itself – as the often erected straw-man image suggests – but in the sense that she provides meaningful (re)constructions, similes, metaphors, cultural images, . . . which become performative towards the forms of live we share (indeed serve to construe). While it is these

¹Ramaekers uses this account as an example to illustrate the Wittgensteinian account of truth as being a matter of agreement in judgements.

very forms of life that in turn shape the way we talk, feel, think, observe, . . . that, in short, shape us.

It is worth noting, however, that the pervasiveness of human culture provides that alterations of our agreements in judgements always start from, or somehow are in connection with, our form of life. Therefore, we must ask if the kind of educational research envisaged here is situated in the ‘margins’ or ‘mainstream’ of the conceivable? If an account just confirms our own preconceptions, if it does not take us by surprise, if it does not constitute a challenge to the beliefs we hold, it is unlikely to allow us to undergo transformation (see also Smeyers (2013), and Stables (2013)). Thus, our agreement in judgements is both a ground to start from and subject to alteration.

Moreover, as is clear from the above, educational research that takes this relation to truth seriously characterizes research not as so much as a tool or set of tools but as a *cultural moment*. The affordances of such a model drawn from the humanities as an alternative to those based solely on the social and natural sciences for educational research are worth pondering. They imply, among other things, that a research outcome is not justified by the rigour of its methodology or the design of its instrumentation, but rather the other way around; the value of an account is appraised, as Stake and Kerr (1995) point out, by how it “shocks the reader out of complacency” (p. 57). Thus conceived, educational research would acquire the full force of the recognition that it falls to people to endow reality with meaning. This shift entails a turn away from the modernist ideal that, in the words of Armstrong (2007), was driven by the conviction that “the truth it sought lay buried alive under the accumulation of misrepresentations, platitudes, and stereotypes” in front of which “modernism represented itself as a salvage operation that could establish contact between mind and language mirroring the Enlightenment relationship between mind and object” (p. 99). Rather, the researcher’s primary task is not to describe reality faithfully, but to *respond* to reality through *symbolic mediation*.² Why this does not entail an ‘open pathway to relativism’ is because, whether data are factual or not, the steps and leaps from raw data to conclusions about their meaning are equally momentous for empirically obtained data as for fictional ones. The real constraining factor is our form of life, and its recognition by the interpretive community – that is, it is both the constraining faculty *and* the faculty upon which the account operates.

This points us to the pivotal role of the imagination in educational research. Just as the past inhabits the present, the imaginative – as part of our form of life – inhabits the real.

Our experience is mediated by the cultural models we have at our disposal. This is, what I take to be, the crux of the claim that we are “beings with borders that are indistinct, merging into the history of the culture that produced [us]” (Hough 1997, p. 101). In this regard, the researcher should not situate herself in the centre of an agreement, but in its margins, expanding our common understandings in new directions. Stated differently, language constitutes our form of life, or – in Jameson’s idiom – it is our prisonhouse (Jameson 1972). The challenge is not how we can escape the ‘prisonhouse of language’, but how we can reshape its boundaries from the inside in order to inhabit (discursive) spaces previously off limits.

It follows that if educational researchers do not let themselves be informed by a possibility beyond what is presently conceivable, educational research is prone to reflect the current consensus, present values and perceptions, leaving our cultural frame of reference unaltered. Educational research in this sense can never be satisfied by just representing reality faithfully; instead, it should try to broaden the boundaries of what a culture presently accepts as valid – *what we take to be beyond reasonable doubt* – if it is to be truly educational.

But how does this relate to truth? As already indicated, the truth value of such an account is not measured by its ability to gain access to reality itself – whatever that may be – but by its ability to construct a language, a vocabulary that, in the words of Hayden White, creates perplexity in the face of the real (Rogne 2009, p. 74). As Gaita (2002) explains, ruminating on Iris Murdoch’s insight that to see the reality of another person is ‘a work of Love, Justice and Pity’, she “did not mean that Love, Justice and Pity are the characteristic causal conditions which enable a distinct cognitive capacity to grasp the truth about another person. She means that these are forms of understanding rather than the enabling conditions of understanding and that what is there to be understood cannot be characterised independent of that fact” (p. 248). A ‘true’ account, then, is one that does justice to the values that make up the fabric of our form of life, human nature, or common humanity.³

Of course, no account of education produced by research lasts forever. At some point, it inevitably becomes obsolete, and risks turning into dogma, cliché, or hegemonic image worthy of contestation and replacement. Thus the scene is set for an endless cycle of renewed (re)presentations, each of them taking root in the residue of the former outdated consensus and waiting to be taken over by new images when their season in the sun is over. The only way to postpone this fate is to provide the research text with enough ‘gaps’ for the reader to ‘fill in’. Only when a text remains indeterminate is

² I draw here on the work of Hayden White (e.g. 1988), who develops these thoughts in the context of Historiography.

³ As respectively conceptualised by Wittgenstein, Cavell and Gaita.

a reader able to respond to it actively. Moreover, as all representations are inevitably in some sense a misrepresentation, only those accounts that prove fluid enough for adaptation will be capable to trigger a ‘transformation of existence’.

Responsiveness and Responsibility as Writers and Readers of Research

At the end of the chapter, Ramaekers points to the role of the reader in educational research. He states: “Educational research can be offered as something that invites us to probe for further meaning, and meaning-making” (p. 59). I would argue that, in a sense, this is the only conclusion we can validly draw from the recognition that in spite of any referentiality, the account of the researcher inevitably starts to live a life of its own as soon as it is detached from the source from whence it originates.

Iser (1972) argues: “The convergence of text and reader brings the literary work into existence, and this convergence can never be precisely pinpointed, but must always remain virtual, as it is not to be identified either with the reality of the text or with the individual disposition of the reader” (p. 279). Thus, as a text is always ‘more than it says’, the reader is both wittingly and unwittingly bidden to engage in the process of meaning-making. The recognition of educational research as a ‘cultural moment’ does not only require the educational researcher to put herself at stake, but entails an appeal to the reader to become engaged with its texts as well. The reading act is in essence an act of recreation. Only when this task is taken up by the reader, when the process of symbolic recreation is being regenerated, does educational research obtain its full force.

Thus educational research which supports this active engagement should be hesitant to draw its truth-value from a referential relation with reality. Construing truth-reality relations referentially is to negate the recognition that ‘the real’ is signified and imply a ‘reality effect’ which denies any human involvement in its creation. Both serve to uphold the myth of the subjective as a *contaminator* of truth.⁴ Rather, educational research could recognize subjectivity head-on, and thus create a space for its consequences to be exerted fruitfully. This includes the space for imagination, which as Iser (1972) points out, in a comment on Gilbert Ryle:

“If one sees [a] mountain, then of course one can no longer imagine it, and so the act of picturing the mountain presupposes its absence. Similarly, with a literary text we can only picture things which are not there; the written part of the text gives us

the knowledge, but it is the unwritten part that gives us the opportunity to picture things; indeed without the elements of indeterminacy, the gaps in the text, we should not be able to use our imagination” (p. 288).

Here, it is the absence of the object of reference that engages the imagination of the reader and asks him to take responsibility for what he imagines. It also suggests that a fixation on accuracy actually distracts attention from the main task that is set by educational research: to envisage what a certain account might mean for oneself. The image of Asimov’s tapes that Ramaekers uses is a case in point: the tapes don’t allow for any interpretation or creative rethinking, they frame the knowledge they contain as fixed, and as such, work towards closure rather than enabling one to actively contribute to the flow of culture. Thus in recalling Derrida’s observation that a commitment to truth requires an “openness to the event”, paradoxically it seems that we should step back from factuality in order to allow truth to emerge.

This is also the reason why an overt emphasis on ‘what works’, or an appeal to empiricism to establish the respectability of an account is not just beside the point, but potentially harmful as well. Recalling Flyvbjerg’s (2001) conceptualisation, such claims do not instigate dialogue, but seek to bring discussion to an end. As such, this approach risks suspending practical judgement, denying its relevance, and thereby strips the educational component from educational research.

On the other hand, in the kind of research Ramaekers envisages through his examples, the researcher does not give final answers or straightforward directions, but indeed “provides input to the ongoing social dialogue about the problems and risks we face and how things may be done differently” (p. 57). The question remains however, of how we should conceive this dialogue between text and reader which might be capable of instigating the ‘transformation of existence’ that Ramaekers charges educational research should help bring about. An answer to this question can be found in the reader-oriented theories of literary studies, whose central point of departure is a breakdown of the subject-object division by positing the text-as-other as another subject that “occupies the reader’s consciousness, existing simultaneously within it” (Castle 2007, p. 174). Thus for Iser (1972): “Text and reader no longer confront each other as object and subject, but instead the ‘division’ takes place within the reader himself. In thinking the thoughts of another, his own individuality temporally recedes into the background since it is supplanted by these alien thoughts” (p. 298).

As the reception of the text takes place within the reader, he is permanently forced to readjust his stance towards the account as it gradually unfolds. In this process, the textual reality fuses with the disposition of the reader – a process

⁴I am drawing here on the work of Roland Barthes (1981).

similar to the ‘fusion of horizons’ Gadamer observes. He is “forced to reveal aspect of himself in order to experience a reality which is different from his own” (Iser 1972, p. 286). Or, as Altieri aptly states: “Who we are is at stake in how we respond” (Altieri 1998, p. 322). Thus the reader who takes up the challenge of the text is not just confronted with the textual content, but also encounters aspects of himself of which he had not been conscious previously. Through this process of anticipation, surprise, recognition and reappraisal and whatever else it invokes, the text becomes an experience negotiated through the reader’s life history. As such, Iser (ibid.) argues, “the ‘reality’ of the reading experience can illuminate basic patterns of real experience.”

It should be emphasized once more that a recognition of the fact that readers are partially responsible for the meaning emerging from a text does not constitute a step into the direction of a relativist abyss, as the emerging meaning remains constrained by the ‘reality’ of the text and – foremost – by the cultural connotations these textual realities evoke. Yet it is also worth pondering whether the individual reading process Iser describes might have a similar potential force towards an entire culture. Is it possible, in other words, to present an account which touches upon our ‘agreement in judgements’ by providing an alternative vocabulary which gives expression to the needs of the present? As the foregoing suggests, such changes should not be expected from the ‘what works’ paradigm in educational research, but might be informed by the realm of the (literary) arts. This hope we find passionately expressed by Krieger (2000):

“Thinking of the monolithic character of the discourses we today encounter outside literature, I can only hope for them to be contaminated by the discourses of the arts. The literary art may perform perhaps its most important service for society by contaminating the reader’s other reading experiences: by inducing the compliant reader to learn to read fully, to indulge in the play of the text’s language and its fictions, thereby preparing that reader to find this sort of play and these fictions in a great variety of texts, many of them not ostensibly “literary” or “aesthetic” (p. 159).

This is, as I take it, the ‘work of justice’ a commitment to truth requires.

To conclude, I would like to draw attention to the observation that the process argued for in Ramaekers’ chapter is reflected in the paradigmatic meanderings within the field of educational research more widely (cf. Alexander (2013), and Smeyers (2013)). Put differently, the history of interpretive research in education can serve as a metaphor for the kind of research which is being envisaged here. Ramaekers’ and such histories offer stories about a dominant language game (i.e. the traditional truth-conception within the social sciences) that is being challenged by alternative imaginaries. As Ramaekers’ examples demonstrate, these alternative forms of educational research do not commit themselves to a ‘what works’ logic, but try to

challenge the tacitly upheld presuppositions of the educational research community. Thereby, they put pressure on traditional discourses by showing how other understandings of the realities under the purview of educational research are possible. As these accounts prove their meaningfulness, they simultaneously become more plausible, thus rebalancing the discursive equilibrium that constitutes the educational research culture. When such competing interpretive frameworks gain recognition, they can no longer be dismissed by simply naming them.⁵ Rather, the borders of our educational research culture are recognized to be permanently subject to a process of contestation and hence, redrawn, venture into discursive spaces previously deemed unacceptable. In other words, the move towards interpretive pluralism entails an expansion of the culture of educational research, and hence the language researchers’ speak, the truths they share, and – at the end of the line – the agreement in judgements their discipline legitimizes itself upon. Thus they contribute to the permanent adaptation and transformation of this culture to the new demands of the age. And if Ramaekers’ chapter has given occasion to ponder the value of educational research thus conceived, it has exemplified what it envisages.⁶

Note on Contributor

Stijn Mus studied educational sciences at Ghent University. He is currently working on a PhD project at the Department of Foundations of Education. His research centres around the question as to what extent qualitative research in education could be challenged, informed and (re)vitalised by the literary arts.

References

- Alexander H (2013) Traditions of inquiry in education: engaging the paradigms of educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 13–25
- Altieri C (1998) Poetics as “untruth”: revising modern claims for literary truths. *New Literary Hist* 29(2):305–328
- Armstrong N (2007) Realism before and after photography: “the fantastical form of a relation among things”. In: Beaumont M (ed) *Adventures in realism*. Blackwell, Malden, pp 84–102
- Barthes R (1981) The discourse of history. *Comp Criticism* 3:7–20
- Castle G (2007) *The Blackwell guide to literary theory*. Blackwell, Malden
- Fish S (1980) *Is there a text in this class? The authority of interpretive communities*. Harvard University Press, Cambridge

⁵ I draw on the work of Stanley Fish (1980) here, who elaborates on the grounds of interpretive acceptability.

⁶ I would like to thank Paul Smeyers and Nancy Vansielegem for their critical reading and useful comments.

- Flyvbjerg B (2001) *Making social science matter: why social inquiry fails and how it can succeed again*. Cambridge University Press, Cambridge
- Gaita R (2002) *A common humanity: thinking about love and truth and justice*. Routledge, London
- Hammersley M (2004) *Get real! A defense of realism*. In: Piper H, Stronach I (eds) *Educational research: difference and diversity*. Ashgate, Aldershot, pp 59–78
- Hough S (1997) Nietzsche's noontide friend. The self as metaphorical double. *The Pennsylvania State University Press, University Park*
- Iser W (1972) The reading process: a phenomenological approach. *New Literary Hist* 3(2):279–299
- Jameson F (1972) *The prison-house of language: a critical account of structuralism and Russian formalism*. Princeton University Press, Princeton
- Krieger M (2000) The "imaginary" and its enemies. *New Literary Hist* 31(1):129–162
- Rogne E (2009) The aim of interpretation is to create perplexity in the face of the real: Hayden White in conversation with Erlend Rogne. *Hist Theory* 48(1):63–75
- Smeyers P (2013) The design(s) of educational research: description and interpretation. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 67–76
- Stables A (2013) Relativism, research and social responsibility: some remarks inspired by Smeyers, Wittgenstein and Lyotard. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 77–81
- Stake R, Kerr D (1995) René Magritte, constructivism, and the researcher as interpreter. *Educ Theory* 45(1):55–61
- Standish P (2002) Disciplining the profession: subjects subject to procedure. *Educ Philos Theory* 34(1):5–23
- White H (1988) Historiography and historiophoty. *Am Hist Rev* 93(5):1193–1199

Paul Smeyers

Abstract

The chapter questions the use of (quasi-) experimental designs as the exclusive (or the best) way to conduct educational research. It focuses not only on the problems of a quantitative approach, often ignoring the ‘ends’ and invoking ‘factors’ which operate independently, but also identifies the weaknesses of qualitative research, i.e. often stating the obvious and betraying the holistic nature of its own presuppositions. Starting from the insights of Peter Winch it is argued that one should start from ‘what makes sense for us’. Educational research is ‘philosophical’, i.e. it is about ‘concepts’ and ‘social practice’. Such an interpretative stance highlights further that educational research should be seen as a performative intervention that is interested in various modes of explanation and thus uses various methods. It contributes to the task of improving upon our practical knowledge of ongoing social life which presupposes dialogue between all those involved.

Keywords

Interpretative research • Winch • Holistic approach • What makes sense for us • Performative intervention

Introduction

It is one thing to hold the position that you cannot consider all aspects at the same time, and another to conclude that you should therefore isolate one or more relevant variables and study these separately. The latter not only presupposes that this is the way to proceed to obtain relevant knowledge, but moreover that this can be done. Yet what seems so evident in the area of reasons for our actions, that is, that various perspectives and interests have to be taken into account, and that these have to be balanced up to the point where a decision is made, is quickly given up when a scientific explanation is sought for. Indeed, the mother of all explanations which we are more than happy to adhere to is the experimental design of which the Achilles’ heel is

prediction and thus generalizability – as if this would reflect the most common situation one finds oneself in. It obfuscates the fact that in real life situations, we often not only ponder about the means, but evidently as well about the ends themselves. Yet when looking for a valid explanation we are likely to forget to give a place for the arguments we consider relevant when making practical judgments, and for what this implies in terms of the paradigm that should shape our approach as scholars. In so many cases we just do not seem to be able to give the decisive reason for doing what we did and this does not affect our acting in the sense that it would paralyse or otherwise incapacitates us to go on. Why have I studied this particular subject, enrolled in a particular university, decided to rent this house, or accepted an offer from an employer? While it is true that *some* reasons may be given, it is another matter whether *all* can be identified, and even more so whether the decisive one can be pointed at. Furthermore, from the observation that it is indeed possible in *some* cases to answer positively to the mentioned questions, it does not follow that it should be our preferred

P. Smeyers (✉)
Faculty of Psychology and Educational Sciences, University of Leuven,
Leuven, Belgium
e-mail: Paul.smeyers@ppw.kuleuven.be

model in *all* cases. Empirical educational research in its various forms has not been blind to these ‘constraints’, yet it has tried to overcome these by insisting on more and more rigorous research, meaning to follow and accept scrupulously a particular technique, method, or methodology. It has often argued that many variables have to be taken into account and that thus more research is needed. Besides this Popperian move towards *truth*, it has at times also vacillated that though no certainty about this or that could be reached, it is nevertheless the only way that some progress may be anticipated, or that – a more moderate version – it is the best approach (or the least worse) we have. A holistic position on the other hand, so many argue, will result in feeling at loss in the many complexities and particularities of a situation leading towards description instead of to explanation. Whether the latter characterization is (more) true to the nature of the phenomena that are studied than the former is a crucial issue; it is at least conceivable that there are logical limits to what research may offer – which is far from saying that anything goes in trying to understand or ‘explain’ why things are as they are, nor that every argument is a valid argument.

Reiterating the Gold Standard

There is, however, a constant temptation to forget all of this and insist on a particular way to proceed when doing educational research. New ammunition was given by the current U.S. federal standards for educational research (see the *What Works Clearinghouse*, Department of Education, <http://www.whatworks.ed.gov>). What is envisaged here is almost exclusively experimental or quasi-experimental designs for research. The message is that only educational research which can establish causality is worthy of funding. It is all about the degree to which an educational intervention (curricular or pedagogical) causes improvement in ‘student achievement’ as measured by standardized test scores. In order to be able to establish a basis for causality, the research designs that are acceptable are ‘a randomized controlled experiment’ (RCT), a quasi-experiment with matching, or a regression discontinuity design. The causal claims must be established by statistical tests designed to eliminate confounding variables from the analysis. Clearly, as Fendler (2006) argues, “This is a particular, and historically specific definition of science. The type of educational research supported by the What Works Clearinghouse (WWC) is not ‘scientific’ in the sense of seeking a deeper and more complex intellectual understanding of educational phenomena. Rather, WWC research is ‘scientific’ in the sense of establishing policy and efficient management of people and resources” (p. 51). Random selection of participants is one of the warrants for the results to be generalizable to a larger number of people that have demographic characteristics

similar to those involved in the study. This is interesting as far as it goes. However, there are crucial issues, which tend to be forgotten, in what seems, at first sight, a very straightforward approach. It is not just that many variables are involved together forming complicated interrelations. There is something more fundamental that is worrying if this approach is used uncritically in the social sciences. Indeed, this approach not only tends to foreground itself as *the* (exclusive) legitimate way to do research, it also ignores what fundamentally must characterize all social (and therefore) educational research in view of the nature of what it is studying, namely, a meaningful context. In discussing this approach Fendler for instance argues convincingly that induction and prediction are confounded, probability confused with certainty and science conflated with social management. She claims that generalizability is a way of thinking that is historically specific to modernity and linked to modern projects of social governance.

Other scholars have criticized the standards for being antiquated and narrow in scope, as well for being both methodologically and ethically inappropriate for research in education. Thus for instance, one finds in a collection in *Educational Theory* (2005, number 3) four papers that deal with what has been labelled the (new) ‘gold standard’ of educational research. In her study, Margaret Eisenhart (2005) discusses several research designs for pursuing questions about causation in education. She opens with the observation that determining causation is a fixation in U.S. society. She reiterates the point that according to a host of critics the report of the National Research Council of the United States (*Scientific Research in Education* 2002) embraces too limited a view of causation and causal explanation and thus advances a position on educational research methodology that differs little from the previously described retrograde view of educational science. Thus she welcomes, for instance, approaches that insist on descriptive knowledge as essential if causal analysis is to succeed and on the fact that causal mechanisms cannot be isolated but instead have to be understood as specific to context and intentions if they are not to lose their causal power. In a similar vein, Pamela Moss (2005), following Gadamer, argues that the value of general principles does not lie in serving as a guide for action, but rather in becoming a guide for reflection. Further, Thomas Schwandt (2005) rejects the dichotomous thinking that drives a wedge between quantitative and qualitative methods. He also draws attention to some potentially worrying developments: first, that educational reform will become little more than managing the challenges of implementing proven practices; second, he observes an absorption of the practical by the technical; third, he indicates that in the name of scientific integrity the focus is all on what schools do (or fail to) and not on the systemic social injustices and inequalities that are largely responsible for the inequalities

seen in school performance. He deplores that in the present market model of educational research hardly any attention is paid to leading a meaningful life and that the ‘examined’ life is equated with the life that is governed by scientific and technical rationality. Finally, Kenneth Howe (2005) laments the ‘unity of science’ idea of which the core principles are best exemplified by the physical sciences with randomized experiments, ignoring the interpretive turn and the associated concept of intentional causation and embracing the idea that politics is external to educational science.

It is further relevant to note that an issue of AERA’s *Educational Researcher* (2006, 35, August/September) published the “Standards for reporting on Empirical Social Science Research in AERA Publications”. These standards were adopted by the Council of the American Educational Research Association in June 2006 and are “... part of AERA’s broader educational mission to advance high-quality research in education and to foster excellence in reporting on empirical research” (2006, p. 33). The Association recommends the use of these standards in the training and preparation of researchers in publishing research. Attention is given to problem formulation, design and logic, sources of evidence, measurement and classification, analysis and interpretation (distinguishing between quantitative and qualitative methods), generalization, ethics in reporting and finally to the title, abstract and headings. That educational researchers can benefit from this goes without saying: it makes transparent what the Association expects and can thus guide the vast number of scholars working in this field when they prepare reports, papers, articles, and books for the academic educational community. Laudable as it is, this document also sets out *standards* that will be used in the complex process of refereeing and thus disciplines the material that can be submitted for publication. In doing this, it creates the conditions for a network of research quality and singles out particular principles, which scholars should abide by. In the first paragraph, this document distinguishes what it calls ‘the guidelines’ for reporting on empirical social science research in AERA publications, from other forms of scholarship, which it recognises as equally important to educational research. Thus it lists: “... reviews of research; theoretical, conceptual, or methodological essays; critiques of research traditions and practices; and scholarship more grounded in the humanities (e.g. history, philosophy, literary analysis, arts-based inquiry)” (p. 33). I surmise that these other forms could have been included as well (evidently under a different label) but the fact that they are not, seems to me highly relevant. Is the leading idea that only empirical research is *real research*? Holding their breath concerning non-empirical forms of research, or glibly paying lip-service to the relevance of such research, carries the overtones of familiar juxtapositions such as those of fact and value, objective and subjective, research and philosophy,

theory and practice. But there is more that is worrying. The approach that is argued for seems to rely on a particular concept of how language operates, i.e. a relationship between language and reality. Often it has resulted in a methodology, as well in quantitative as in qualitative approaches, where various methods to study educational problems are offered as recipes, which could be taught and then applied in view of particular problems. Unfortunately, such a separation of method and content creates in the area of social sciences more often than not insurmountable problems.

Problems of Quantitative and Qualitative Educational Research: Two Examples

To substantiate the problems of quantitative and qualitative educational research we are confronted with, I will have a closer look at an example of each. An interesting case is The Tennessee Studies of Class Size, known as project STAR, Student/Teacher Achievement Ratio (see Mosteller et al. 1996). Project STAR is seen as an experiment that starts from the idea that in smaller classes, teachers have more time to give to individual children. In the experimental classes, the class size was reduced from around 23–15, by approximately one-third, in kindergarten, first, second and third grades (ages 5–8); the children moved into regular-size classes in the fourth grade. There were three kinds of groups: classes one-third smaller than regular-size classes, regular-size classes without a teacher aide and regular-size classes with a teacher aide. The experiment was carried out in 79 schools in the first year; both children and teachers were randomly assigned to the classes. In the second year it included 76 schools with 331 classes including 6,572 children in inner-city urban, suburban and rural schools. It was continued for 4 years (1985–1989). After this period there was a second phase, the Lasting Benefits Study, which followed participating children into later grades and recorded their academic progress. The major findings on class size are, firstly, that smaller classes did bring substantial improvement to early learning in cognitive subjects such as reading and arithmetic; secondly, that the effects persisted into grades 4, 5, 6, and 7, after pupils moved to regular-size classes, and finally that students who had been originally enrolled in smaller classes continued to perform better than their peers who had started in larger classes. Incidentally, minority students gained twice as much as the rest during the first 2 years before settling to about the same gain as the rest.

In their discussion Mosteller et al. (1996) indicate that there are many issues involved when a well-designed and implemented study comes out with a definite finding. Serious consideration has to be given to all the available

alternatives, and to the costs and social consequences of implementing the new policy suggested by the findings. They stress that these findings do not automatically mean that reducing class size is the best way to improve schooling – this has to be compared to other measures (for instance, one-to-one tutoring by qualified teachers, peer tutoring, or cooperative group learning). Though the results of the STAR-project have not generally been disputed, some critics have pointed out that other elements as well that have to be considered, such as the preparation time for teachers which is supposed to be higher for larger classes; whether larger classes are given to more experienced (or possibly better) teachers; and the views of pupils themselves (whether they feel happier, believe they are less likely to be bullied and are more confident about speaking up for themselves and participating in practical activities). Other more general issues have also to be taken into account: the relationship between class size, teaching methods and the age of the pupils. Goldstein and Blatchford (1998) also draw attention to several technical problems, which may arise because researchers have ignored the problematic aspects of measuring or defining certain concepts such as: the sample population may differ from the target population; reduction of class sizes within a large school may not be the same as an equivalent change in a small school; the institutions or populations which are most accessible for study are often atypical; a design where randomisation occurs only at the school level may not be representative of the real world where typically differential sizes do exist within schools; teachers may alter their style of teaching (they might tend to use more whole-class teaching methods and concentrate more on a narrower range of basic topics), and consequently compensate in a number of ways with larger classes.

These kind of studies also give occasion to comments concerning this kind of research (randomized field trials) itself. First of all, it seems that the benefits of reducing class size are determined in terms of factors (independent and dependent) that can be measured and manipulated in their constituent parts. What does not fit into this experimental pattern is mostly simply left out, in any case in the experimental design (such as the wellbeing of pupils and teacher workloads). It is true that most of the researchers working in this area accept that the higher cost of smaller classes is a relevant consideration, however, they are much more concerned with establishing whether or not there is an effect, rather than with considering the strength of the effect that would justify higher spending on education. This generates a picture, which suggests that once the facts have been determined, the conclusion (i.e. to decrease class size or not) follows on of its own accord. Second, it is difficult to see how long term studies can accommodate for situational/historical change. It is not only impossible to foresee which new elements have to be taken into account, but what is

ignored are the different elements which, in their interaction with each other, create something new (which is not just the result of addition or subtraction of variables seen as factors). Problems of discipline for instance, may disrupt the interactions to such an extent that regularly observed relations between variables no longer hold. Third, and less technically but perhaps even more importantly, the favoured design seems to ignore the fact that teachers deal with class situations (or learning situations) in a creative manner. It comes as no surprise to find in many studies that it is not so much class size that is important, but the way the teacher deals with it, that is, varies her teaching to accommodate optimal student learning. Teachers will look for opportunities for students to learn and thus act more in the spirit of ‘making the most of it’, rather than carefully *following* regularities or causal inferences. They realize that there are many roads to Rome, and also that it may not be the only place worth going to. All three of these conclusions could be seen as strengthening the case for a more holistic approach, where the relation of the elements that are involved is given a more prominent place. It seems that in educational contexts it is not so much factors or elements that have to be studied as such, but the complex relationships between them. Here the presence or absence of something may change the whole picture and, consequently, the conclusions that can be drawn from a particular setting. Yet from the position that is generally embraced, such studies are seen as irrelevant due to their lack of potential for generalization. Quantitative empirical research belongs to the paradigm of causality, which cannot (or only at great pains and by changing the meaning of ‘causality’, i.e. incorporating ‘reasons’) give a place for the reasons human beings invoke for doing what they are doing. Or, it is so piecemeal that it is hardly relevant given all other kinds of factors. Does this rule out experimental or even empirical research? For some that is the conclusion, but this seems wrong to me. I will return to this later.

There is of course a strand of criticism against the use of ‘cause’, of determinism but even of indeterminism (as a descriptive statistical category) in the sphere of human explanations. This is not to deny that human beings are exempted from causal processes generally, but that behaviour itself can exhaustively be made clear in such a way. It is argued that human beings give meaning to their life (among others by Ricoeur, Gadamer, Wittgenstein, Winch, and Taylor), to be understood as something that is different from things which just happen to them (understood as the law-like explanations and predictions of the natural sciences) and that research should focus on this. For example, for some (such as Winch), to understand human conduct comes down to comprehend the reasons of one’s actions and the understanding that is offered should be of the same kind as the understanding involved in the ‘practice’ in question

(using descriptions in terms of everyday language, often by verbatim expressions of the practitioners themselves). This does not imply that technical concepts cannot be used, but if so their meaning will 'rely' on everyday language. Various qualitative methods and techniques have originated from this interest including case studies, participatory observation, interviews, analysis of policy documents, content analysis and so on and so forth; even a technical vocabulary has developed which includes terms such as horizontal and vertical analysis, 'thick concepts' and triangulation. The researcher brings to the forefront what was as yet not fully realized by the participants or she may re-conceptualize the problem through her interpretation and in this way 'solve' the problem. As in many cases such as multicultural issues, feminist research but also studies about teachers and teaching, narrative data are gathered through interviews and self-descriptions for instance.

A closer look at a typical example of qualitative research may be helpful to understand the nature and the problems of this kind of approach. Some time ago the professional development of Belgian primary school teachers was investigated (Mahieu and Vanderlinde 2002). The study deals with recent graduates who have for the first time their own class. It is an important year for their professional development conceived as a lifelong and complex process of learning, which leads to qualitative changes in the way they act and function, i.e. interact with the professional context. Obviously, they still have a lot to learn, most importantly matters which could not be taught at the college. The leading research question of the study is: How does the personal frame of reference and their micro-political learnedness evolve and change during the first year of their career? A qualitative research approach was chosen, in particular, biographical research. After a questionnaire collecting some background information, there was an in-depth interview and three more interviews with in total 8 primary school teachers. The interviews were recorded and typed out, subdivided in fragments and then coded to prepare for a content analysis. A synthesis of the interview was composed and presented for final approval to each of the teachers. Throughout, two researchers were involved who checked each other's interpretations, for instance concerning the codes that were given and the syntheses that were made. A so-called vertical (or in-depth) analysis was conducted for each teacher and a horizontal for the different aspects across the respondents. Again checks were made between the researchers who kept moreover a logbook of everything that they did or that happened within the context of this one and a half year period in which the data were gathered. The researchers were conscious of the part they played themselves in doing this research and how this could influence their findings. They tried to be as honest as they could and as methodologically pure as possible. The result is a piece of research that is detailed,

sophisticated, aware of what could go wrong and constantly involved in anticipating possible future methodological problems. Because it uses the lived experience of the teachers as expressed in the interviews, it has a high degree of what is technically labelled 'validity', concerning what is studied. As indicated, the researchers were also anxious to have reliable data and constantly monitored the quality of what they were doing themselves.

So much for the research question, the design and the method that was followed. I will now briefly deal with some of the results – evidently a selection has to be made in which I focus on the elements that were used in the comparative analysis of the syntheses (the horizontal analysis). It was concluded that: the first year is a year of intense learning, particularly relational – being responsible for their own class, the teacher needs to develop relationships with other actors within the school, this has its own problems, is a big challenge and an important task (teachers say they know too less about this on the basis of their own college education); when they applied for a job teachers really felt the micro-politics of reality, the power of the local school governors; they all regard it important that there is a colleague who is in charge of a parallel class (as someone they can or would like to rely on), and they also mention the crucial importance of their dealings with parents; the relation with the head too was felt very important, and so was the experience of functioning in a team; on a more basic level they were all concerned with securing to have a job the following year, and furthermore they all experienced the importance of practical things in the context of the day to day functioning in the school. There are a few more results the researchers report, but let me end with a final and interesting conclusion: All teachers experienced themselves as insecure, badly prepared, inexperienced and not fully-qualified.

I deliberately did go on into some detail about this research and have tried to give a good picture of it. Moreover, I want to acknowledge that in my opinion this research has been carried out according to the highest standards appropriate for qualitative research. Yet, one cannot but wonder whether what was found, i.e. what we know now, after so much work and such mark of expertise, is really something that was worth the effort. In what sense is it different from what one 'knew' beforehand? But even if there is something we would not have come up with in our arm-chair thinking, is this kind of knowledge useful then, and for whom, in what circumstances, and to what extent? Surely, if one is not familiar with teaching and teachers all of this will open up the sphere of the experiences of primary school teachers during their first year of teaching. But would not most people who are teaching in a school be able to come to the same conclusions without engaging in this kind of research? And in as far as detailed information is concerned, this will necessary be different from case to case. So there is

not much point to gather this in view of using the results for other settings. I do not disagree that the insights and the well written research report may be interesting for heads, and even for lecturers teaching in Teacher Training Colleges, but let me be blunt about this, is it really more than truisms, more than 'common sense' that draws on a particular context the researchers have come up with? Their general conclusions are very similar to the relationship between speeding and accidents, drinking and driving, being depressive and suicidal, and so on and so forth. And though there is value in seeking empirical evidence for so called generally held beliefs, it does not go very far. Of course, sometimes people need to be reminded of these general facts of 'human nature', but one may wonder whether and in what sense this kind of research is helpful at all. There are also more 'fundamental criticisms' of this kind of research. The last decades have seen a growing interest in qualitative research and recently narrative analysis has become very popular. This has generated heated discussions between the quantitative and qualitative camps, but also more in general among educational researchers. The question is whether the use of stories in narrative analysis is reconcilable with the focus of generalization characteristic of much education research.

The Reconstruction of the Researcher and 'What Makes Sense for Us'

Educational researchers are interested in 'how things are' (what the facts are, how those who are involved feel about particular things), and in this sense they are interested to understand what they are presented with. In some areas this implies descriptions or reconstructions of the participants' experiences, in others being able to make predictions. It is clear that this presupposes a particular conceptual framework (sometimes also a theory) or at least a set of concepts in order to make sense of the multitude of phenomena one is confronted with. Clearly, it is generally accepted that one is part of an intersubjective reality that may be characterized in various ways (what is considered to be a fact, what we value, how we situate ourselves as human beings). But research is at least potentially also nearly always interested in change, in making improvements (either to prevent particular problems or to address these). Thus it is interested in understanding ways to manipulate certain elements in view of certain outcomes. In this sense the value-ladenness and maybe even the utopian dimension (how one could conceive things differently) come unavoidably forward. This presses the point about the nature of what the researcher is really doing (or is allowed to do, or should have to do).

The distinction made by Polkinghorne (1995) between an 'analysis of narratives' and 'narrative analysis' is particularly illuminating. In an 'analysis of narratives' one looks for

common features in different cases in order to define them within a broader category. By pointing at features that different experiences have in common, one can construct cognitive conceptual frameworks. The purpose of the paradigmatic analysis is not only to discover and to describe categories, but also to describe the relationships between categories. In many cases this kind of research is generally analogous to a quantitative design (including hypotheses), with the exception that qualitative data are gathered, that is, they refer to what people feel about (or what their experience is with) particular things, and what they say that their reasons, desires and intentions are. In 'narrative analysis', on the other hand, the data are mostly not in a narrative form. The information comes from different sources: the researcher arranges events and actions by showing how they contribute to the evolution of a plot. The plot is the thematic line of the narrative, the narrative structure that shows how different events contribute to a narrative. The writing of it involves an analytical development, a dialectic between the data and the plot. The resulting narrative must not only fit the data but also bring out an order and a significance not apparent in the data as such. The result is not so much an account of the actual happening of events from an objective (i.e., something we agree about intersubjectively) point of view as the result of a series of constructions, it is instead a particular reconstruction of that researcher. Whereas in the 'analysis of narratives' the narratives (gathered from the participants) are the source of knowledge, the narrative in 'narrative analysis' is the result of the research, i.e. the creation or interpretation the researcher comes up with. Not only in the conclusion that is offered is the researcher *present*, but she is also involved all through the process (though different compared to the practitioner's involvement). This kind of 'interpretive research' comes close to those areas of scholarship (see above) that were distinguished from educational research grounded in the empirical traditions of the social sciences. It seems analogous to history and philosophy of education, where, in other words an interpretation is offered.

If it is accepted that to study educational problems one needs not only a quantitative approach but also one or other kind of qualitative stance, it is not clear whether the kind of qualitative research that is merely a use of qualitative data within an overall quantitative design is not contradicting its own presuppositions (because it is likely to betray the holistic nature of the meaning giving process as a consequence of 'generalization'). In other words, the question can be raised whether it is not trying to do something which cannot be done, at least in as far as it accepts seriously that one should not strip words of any context in which they might be used for saying something in particular. Second, and perhaps even more important, is not all empirical educational research guilty of trying to help to escape from the particularities of

a situation one finds oneself in, which closes one off from being responsive to the situation one finds oneself in? Granted, there is a sense in which knowing certain facts, being acquainted with the experiences people are likely to have in certain situations is helpful to understand educational problems. But the issue is how far this type of research goes, in other words, whether it offers more than a starting point. What occupies me is the nature of research that does justice to the particularities of the situation and what its characteristics are. These reflections on the nature of empirical educational research are highly relevant in a time where research is used as a quality label almost equivalent to 'sound thinking', and experts are solicited to give advice on all kinds of issues belonging to the educational context.

A particularly interesting stance concerning social science can be found in the position of Peter Winch. Aspiring to be an empirical study, it has taken, he claims, the wrong turn: it exemplifies what is characteristic of a positivist approach. It should rather, in his view, engage itself with understanding human practices and not so much with predictions of social behaviour, for the central concepts that belong to our understanding of social life are, according to him, incompatible with the concepts central to the activity of scientific prediction. He draws from the later Wittgenstein such ideas as 'following a rule', 'human shared practices' and 'what it makes sense to say', and devotes a lot of attention to the place of 'reasons' and 'causes' and their respective role in natural and social sciences. The result is a particular view on the task and method of social science as distinct from an empiricist social study. And concerning philosophy he argues that it is not only concerned with eliminating linguistic confusions; thus and by no means is genuine new knowledge only acquired by scientists by experimental and observational techniques. The philosopher is concerned with the nature of reality as such and in general and thus deals with the question 'What is real?' The philosopher reminds her audience of the way in which particular concepts are used and thus offers an elucidation of a particular concept: "... in discussing language philosophically we are in fact discussing *what counts as belonging to the world*" (Winch 1958, p. 15). The relevance of conceptual enquiries into what it makes sense to say should therefore not be underestimated. Thus the core concept of the language-game (expressions and activities, the use of a word in a particular social intercourse) or 'practice' is established. In answering the question what it is for something to be real, the empirical observational methods used in the natural sciences and in everyday life cannot possibly be the only yardstick. If so, whole areas of human practice would be excluded (such as ethics or aesthetics), but one would also be confronted with a logical problem. If what is real is a matter of what can be determined by the methods of empirical sciences, this is not a statement from within science but

about science. Here is a view of language where words are to be understood in terms of their use in the lives of those who deploy them. Language is socially founded and the possibility of communication rests on the fact that we agree in the use of our terms. Having a language, and the notions that go along with that, such as meaning and intelligibility, are logically dependent for their sense on social interaction between people.

Educational research should come to terms with Winch's suggestion that it must be philosophical in character and is foremost concerning with 'what makes sense for us'. That implies that the starting point is the self-understanding of those involved: educators and parents, students and children. It does not make sense therefore to break down teaching into atomic skills and sub-skills; nor to conceive education almost entirely in terms of examination results; nor to regard moral psychology as a series of points on the scale of self-esteem; nor to talk of parenting in terms of developing particular skills and quality time to empower children. In empirical educational research nowadays there is typically a starting point (topic, research question, etc.), then a procedure (the gathering of data, etc.) and then an analysis and discussion. A lot of attention is paid to the middle stage, concealing the fact that the really big questions concern the values at the heart of, or taken for granted in, the identification of the topic and the question, and of course in the ensuing discussion. Winch's position implies that the discussion has to start from a particular social intercourse or 'practice'. Normative and value-laden elements have to play a crucial role throughout educational research and not just in the first or final stages.

In trying to be objective, and in identifying 'objective' with 'free of bias' the fact is concealed that we always and inevitably bring our pre-understandings with us into any situation. This is not to embrace the claims of a crude constructivism to the effect that all meaning is created *ex nihilo*, but only to argue that whenever we conceptualize a particular part of reality, this necessarily occurs within the boundaries of what already makes sense for us. Ideas about what is worthwhile, about the nature of a human being, necessarily enter into the picture. That is why we cannot without further qualification make statements such as that 'European explorers brought civilization to primitive people'. Unlike earlier generations we are aware that what is civilized and what is primitive can be contested. Similarly, the common claim that a particular approach to a problem 'works', or that research should endeavour to discover 'what works', must not be allowed to conceal how much is dependent on just how 'what works' is defined. Unacknowledged metaphysical and ethical assumptions are usually lurking here: for instance to the effect that this or that is an acceptable way of achieving results. Many researchers do not seem to be any longer aware of things in terms of their multifarious

meanings and interconnections, but isolate them in order to study their 'reality' and then worry about how they are linked and connected to each other. We do this because we are unwilling to live with complexity. To replace scientism and doctrinaire empiricism with a more modest view of science is perhaps the first step towards wisdom. Of course this does not mean that 'scientific method' has no role at all to play within social science, but that it must make out the case for its relevance in each particular instance against other approaches that also offer insight and understanding, whether in conjunction with measurement and statistics or apart from them.

An Interpretive Stance

What we seem to need is an idea of research that gives up a number of the old binaries such as values/facts, objective/engaged, researcher/practitioner, concept/fact, and qualitative/quantitative. Not that these issues do not matter, but they seem to be dated given certain 'developments' in philosophy itself. The disdain directed at some of the achievements of so-called postmodern philosophy is hardly an issue here. I will therefore characterize educational research differently and avoid the so-called philosophical/empirical dichotomy. So if we start afresh, what is it that we should bear in mind when we gather data that are relevant and come up with insights that are valuable for theory and practice, again not to be seen as different domains, but rather as different ways of dealing with the envisaged problems? Much of the aforementioned oppositions or dichotomies tend to, unfortunately, lead a life of their own. Instead of being helpful they obscure the full picture of what is at stake. A more fruitful metaphor may be to see these as two sides of the same coin. The fairy tale that it is possible to isolate (observable) factors and still deal with something that is relevant in future cases, should once and for all be buried. The most a researcher can come up with is a new angle that might be helpful for particular problems. And it is not clear beforehand, which problems may be solved and which others may be generated through particular interventions. Judgment involves experience and the development of wisdom through participation in a community of practice (practitioners and scholars). Weighing the evidence and foremost arguments, that is, judgment as Richard Smith (2006) uses that term, may seem more crucial than so-called empirically based know-how.

The pitfalls of this positivist stance have been long clear. Our move should therefore be in the opposite direction, that is in accepting that concepts, theories, reasons etc. always presuppose a background in order to make sense. It is similar but broader than the position which argues that all sciences are theory-laden. If this is correct there is no longer a need to rule out causes or observed regularities when

explaining human action. Do they too not presuppose a meaningful context? To give a causal explanation of human behaviour then only refers to the fact that it is described in certain terms, in the same sense as an explanation in terms of reasons presupposes a background of shared understanding. Some human actions may thus be characterized in terms of causes and effects, but it may also be possible to give descriptions in terms of regularities (how antecedent variables go together with subsequent conditions) or to refer to reasons. Some activities may almost exclusively be understood by using one type of explanation, while in other cases several will be possible. Thus whether something is *really* explained, or whether 'reality' here is merely a matter of not being fictitious, should not necessarily invoke a correspondence theory of truth where sense data are the exclusive building blocks. Instead, as Winch rightly argued, it is always about 'what is real for us'. It goes without saying that answering a research question in terms of causes and effects will not generate an answer in terms of the understanding of those involved. But this kind of circularity is not to be regretted, as it is characteristic of all explanation. Science, as for that matter any kind of explanation, will always take the data which are to be interpreted at a next higher step of abstraction, thus invoking a particular theoretical construction which makes sense. This is a circular process in which each level is taken to account for, to derive from, or to elaborate on the other. Thus instances are explained by patterns and patterns by instances. Clearly, here it is not prediction that may exclusively provide us with a point of reference, nor is the method of the natural sciences the only way to come to valid conclusions. But even if the possibility of prediction is what one is interested in, even then a meaningful background cannot be absent. How could it possibly be doubted that we always start from making distinctions in terms of what makes sense for us? For example and at a slightly higher stage of abstraction, there seems at first sight to be a so-called objective point of reference in medicine (being healthy, living longer etc.). But it is not only the case that surgery or medication can have side-effects which may prompt one to give up on a particular treatment, there is also the debate about quality of life which plays a role in this decision process. And, as is clear for instance from the area of environmental ethics, there are in many cases conflicting interests that have to be dealt with. We have to decide for example whether to safeguard a particular wildlife area or to build in that location a new airport, thus relieving thousands of people of aircraft noise.

An adequate methodology of the social sciences should therefore combine causal explanation with intentional understanding. Following Bohman (1997), I too accept that hermeneutic philosophers of social science – he mentions Taylor and MacIntyre – are in danger of ignoring this due to

their one-sided arguments, ruling out every kind of causal explanation in this context, and also due to their claim that all explanations are supervenient on actors' own interpretation of their actions. Understanding the reality we live in demands an understanding of nature itself but also of the kind of beings we are. And if one accepts that human beings are of a different kind than physical objects, it follows that they have to be studied at least partly in a different manner. Moreover, the conceptualisation of social (and political) problems demands an ever-renewed rethinking of reality with similar instruments. To think again can only mean to think from a different point of view what one is trying to understand (and perhaps, change). It will be clear that an investigation of what exists is only a starting-point. What is at stake shifts to what is at stake for someone (again for the other and for myself), where the other is recognized in her personal struggle as an emotional being, is, unstructured justice. Rigid approaches to social (and political) problems will have to be complemented by a more flexible ethical sensibility. To see the other is to look for the way in which she expresses herself, gives shape to herself in the struggle with herself. But to touch the other is also to confront the other with one's own struggle by means of the evocative instruments that are at my disposal. That we inevitably 'violate' the other is clear enough. After all, the understanding of the other is at the same time a negation and a constitutive affirmation. We understand the other as an intentional object that we crave to understand. We want to read the story of the other, too often without recognizing the illegibility of her story. This does not necessarily imply that we would not be able to understand her or do not want to do justice to her. The reading of the story of the other is however at the same time a reading which has interfered with my own story. What rests for us is to surrender to the intersection of this reading with its reader, and to what this does to us. Thinking about the nature of a story, not only in educational research as the raw data one starts from but of educational research itself, may be a way to do justice to the study of education. On the one hand a story can be conceived as what joins people together, on the other hand as what can only 'show'. If educational research can be heterogeneous and produce different (kinds of) results and moreover can be presented in various ways, if different stories can be told, if it joins in dialogical speaking and doing, this implies that it can no longer be described as quantitative or quantitative, but instead as interpretative. Indeed, the fateful mistake would therefore be to attempt to say something about *what must be happening* when we see (or otherwise experience) one thing or another, to be so and so. This characterizes an attitude not even of keepers of truth but of registrars of truth, something that we cannot become without losing ourselves, as Baz (2003) claims. To say that educational research has to be interpretive echoes furthermore Mulhall's (2000) position that interpreting "... things into practical life has no distinctive

structure or principles because it is fundamentally not based on the following of some pre-given set of rules; it depends upon imagination, the ability to see connections, the creative shaping of one's sense of how aspects of human experience hang together or fail to do so" (p. 264).

Educational Research: Taking Part in the Ongoing Debate

Affeldt (1998, p. 31) argues that we should be hesitant about the use of criteria because they may be seen as marks and features which 'tell us' when the application of a concept is licensed, and by articulating grammatical relations among our concepts 'tell us' what exactly we have said in any particular instance of applying a concept. They should not be seen as determining, that is, what our concepts mean and to what else we (must) have committed ourselves or made ourselves responsible in employing a particular concept (cf. p. 5). In a similar vein content analysis of interview protocols, horizontal and vertical analyses of case studies, and the use of observation categories (stipulating a neutral description in behavioural terms), diffuse us from the particular in the name of objectivity and generalizability. There is something that may be called a first-person aspect that is present in the story the researcher presents. Yet in another sense she seems to claim to speak for others. Her endeavour therefore involves a peculiar mixture of self-reliance and vulnerability. What she does is *only* reminding her audience of the very possibility of a different scenario. If the researcher claims to sense something others fail to see, there may be no agreed-upon procedure by means of which the issue can be solved. One cannot decide in advance what projections are tolerable. But this is not that different from how we are situated in a moral debate.

I will conclude with a number of characteristics that in my opinion therefore mark the nature of educational research. I suggest that it may be better to speak of *educational research* or *the study of education* (1), than of an educational science, given the connotations the concept 'science' has in the English language. Furthermore, what has been argued for concerning human behaviour should also characterize the study of educational phenomena. That means that *various modes of explanation* (2) may find their place in trying to understand what is involved in teaching pupils and students, in child-rearing, in continuing education and in educational policy and evaluation, and so on. There is indeed no need for a single method nor to prioritize one, but as Wittgenstein argues concerning philosophy: "There is not a philosophical method, though there are indeed methods, like different therapies" (Wittgenstein 1953, #133). Much will depend on the problem that is studied, but also on *the kind of theoretical interest* (3) one is pursuing. Whether or

not the proposed measures *work* is another matter, but clearly if an educational researcher studied this issue for instance in the context of policy research, she would have to take such empirical outcomes into consideration. This moreover points to something outlined at various places in this chapter, that social research does not give us fixed and universal knowledge of the social world as such, but that it rather *contributes to the task of improving upon our practical knowledge of ongoing social life* (4). That this presupposes *dialogue between all those involved* (5) goes without saying. But when we realize that there are many and often highly contested versions of participants' self-interpretation, we will also see that though the latter are the only plausible starting place, more is needed for good dialogical and social scientific practice. Here science is no longer seen as disinterested and value-free: instead there does not seem to be strict boundaries between science and society. In her contribution the researcher as, the interpretive pluralist, will among other things explore the operation of many different practical norms, thus through her interpretation make implicit norms explicit. But she will also and in my opinion necessarily *invoke a normative stance* (6). Here facts are no longer seen as exclusively made to refer to objective things in the world or things in themselves, neither are values seen as subjective states of the mind. In avoiding these and other conceptual confusions science reveals itself instead as a performative intervention. As Winch argued, what matters is 'what is real for us'. Though the researcher's work is in this sense also of a political nature, it does not coincide with that of the practitioner or the politician. The writing of research may be seen as a case of *positive slowness* (7) that prevents us from being absorbed in the chaos of unmediated complexity. It allows us time to think and is performed at some distance in the interest of perspective and justice.

In some sense educational research too is an educational practice, perhaps only of a slightly different kind. The reflection that is offered is philosophically engaged and will necessarily go beyond the empirical. It will go beyond means-end, instrumental reasoning and is thus unsettling in contrast to the kind of empirical research which draws on and reinforces the pull of precisely that kind of reasoning. This kind of reflective research does not sacrifice itself on the altar of prediction. And though it may want to start from the wisdom to be found in common sense, it will go beyond that in realizing a person's own values, in coming across new possibilities for education.

Note on Contributor

Paul Smeyers is Research Professor for Philosophy of Education at Ghent University and part-time Professor at K.U. Leuven. He teaches philosophy of education and

methodology of the *Geisteswissenschaften* (Qualitative/ Interpretative Research Methods). He has a wide involvement in philosophy of education (with more than 250 publications). He holds, or has held several positions in the International Network of Philosophers of Education (President since 2006). For almost a decade, he has chaired the Research Community *Philosophy and History of the Discipline of Education: Evaluation and Evolution of the Criteria for Educational Research* established by the Research Foundation Flanders, Belgium (Fonds voor Wetenschappelijk Onderzoek – Vlaanderen).

References

- AERA (2006) Standards for reporting on empirical social science research in AERA publications. *Educ Res* 35(6):33–40
- Affeldt S (1998) The ground of mutuality: criteria, judgment, and intelligibility in Stephen Mulhall and Stanley Cavell. *Eur J Philos* 6(1):1–31
- Baz A (2003) On when words are called for: Cavell, McDowell, and the wording of the world. *Inquiry* 46(4):473–500
- Bohman J (1997) Pluralism, indeterminacy and the social sciences: reply to Ingram and Meehan. *Hum Stud* 20(4):441–458
- Eisenhart M (2005) Hammers and saws for the improvement of educational research. *Educ Theory* 55(3):245–261
- Fendler L (2006) Why generalizability is not generalizable. In: Smeyers P, Depaepe M (eds) *Educational research: why 'what works' doesn't work*. Springer, Dordrecht, pp 51–64
- Goldstein H, Blatchford P (1998) Class size and educational achievement: a review of methodology with particular reference to study design. *Brit Educ Res J* 24(3):255–268
- Howe KR (2005) The question of education science: experimentism versus experimentalism. *Educ Theory* 55(3):307–321
- Mahieu S, Vanderlinde R (2002) De professionele ontwikkeling van beginnende leerkrachten vanuit het micropolitiek perspectief [The professional development of recently graduated teachers from the perspective of micro politics]. Unpublished master's thesis, Katholieke Universiteit Leuven, Belgium
- Moss PA (2005) Understanding the other/understanding ourselves: toward a constructive dialogue about 'principles' in educational research. *Educ Theory* 55(3):263–283
- Mosteller F, Light RJ, Sachs JA (1996) Sustained inquiry in education: lessons from skill grouping and class size. *Harv Educ Rev* 66(4):797–842
- Mulhall S (2000) Misplacing freedom, displacing the imagination: Cavell and Murdoch on the fact/value distinction. *Philosophy* 47 (Supp vol):255–277
- National Research Council (2002) *Scientific research in education*. National Academy Press, Washington, DC
- Polkinghorne D (1995) Narrative configuration in qualitative analysis. *Int J Qual Stud Educ* 8(1):5–23
- Schwandt TA (2005) Diagnostic reading of scientifically based research for education. *Educ Theory* 55(3):285–305
- Smith R (2006) Technical difficulties: the workings of practical judgement. In: Smeyers P, Depaepe M (eds) *Educational research: why 'what works' doesn't work*. Springer, Dordrecht, pp 159–170
- Winch P (1958) *The idea of a social science and its relation to philosophy*. Routledge, London
- Wittgenstein L (1953) *Philosophische Untersuchungen* [Philosophical investigations] (trans: Anscombe GEM). Basil Blackwell, Oxford

Relativism, Research and Social Responsibility: Some Remarks Inspired by Smeyers, Wittgenstein and Lyotard

10

Andrew Stables

Abstract

Paul Smeyers argues convincingly that ‘educational research should be seen as a performative intervention’: in effect, as a move in a language game. This chapter explores some of the controversial implications of this position, construing it as contributing to a broader philosophical debate about realist and relativist orientations in educational research that raises many issues about research, policy and practice. The challenge for the relativist is to articulate a set of criteria for arbitrating between incommensurable positions. Smeyers, drawing on the later Wittgenstein, adopts the concept of the language game, but does not consider (other than in passing) the radical implications of its deployment in the postmodern literature, most notably by Jean-François Lyotard. Smeyers also (perhaps for lack of space) employs an unproblematised conception of causation to progress his argument. It is suggested that the consequences of fully embracing Wittgenstein and/or Lyotard in educational research would be far reaching, involving more than the embracing of an interpretive paradigm as commonly construed.

Keywords

Interpretive research • Smeyers • Wittgenstein • Lyotard • Relativism

Introduction

This chapter should be seen as a complement to that of Paul Smeyers rather than as a critique. Smeyers’ argument is sound and compelling, as far as it goes. Drawing on Peter Winch and Wittgenstein, Smeyers makes the case for interpretive research (and for understanding research as interpretation, however it is undertaken) clearly and convincingly.

It might nevertheless be argued that Smeyers takes certain philosophical positions for granted in making his case. While this may be for pragmatic or operational reasons (we all have to take certain things for granted as Wittgenstein, for one, was keen to remind us [Wittgenstein 2001]), the problematisation of one of Smeyers’ key assumptions opens a new set of philosophical debates that have profound

epistemological and ontological implications, of relevance to educational researchers. This is his assumption about causality.

Causes, Reasons, Habits and Prompts

Smeyers takes an established line in contrasting science, that operates on the assumption of natural laws and causality, with the human concerns of interpretation, reason and language. This contrast underpins, as he shows, our conceptions of human reality and thus drives our methodological choices as researchers. So far, so good. However, what is overlooked here is the rich philosophical debate around causality and its relation to human reason, language and interpretation; this broad debate also encompasses certain tensions within the philosophy of science. This debate has been carried out among philosophers in the Anglophone empiricist tradition as well as in Continental movements such as Gadamerian

A. Stables (✉)
Department of Education, University of Bath, Bath, UK
e-mail: a.w.g.stables@bath.ac.uk

hermeneutics and Francophone poststructuralism. To leave this unproblematised is, in effect, to acquiesce in a kind of humanism that accepts mind-body dualism uncritically.

The Scottish empiricist, David Hume, offered a strong critique of conceptions of causation in *An Enquiry Concerning Human Understanding* (Hume 2008), in which he argues that all that human beings can know is that certain events tend to follow other certain events; we may attribute this to causation and natural law but such an attribution is no more than an extrapolation of our own experience. Perhaps because of the immense influence and almost universal applicability of Newtonian physics, that operated on quite the opposite assumption (i.e. that human beings discover the operations of natural law through science), Hume's sceptical voice within the great tradition of British empiricism is often overlooked. However, it is an argument that is not easily countered: the patterns that we find in the universe and make work for us through applying them in our technologies are not necessarily prior to our finding of them. We may simply be engaged in a huge modelling exercise to which all forms of research variously contribute. We are not logically obliged to comply with a correspondence theory.

To varying extents, Hume's scepticism finds its legacy among philosophers in the pragmatic tradition. For pragmatists, an entity is definable only in terms of its effects or uses:

Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object.

(Peirce 1878, p. 293)

On this account, concepts and propositions must be judged with respect to their explanatory and instrumental power rather than their correspondence to prior external reality. This does not imply that all pragmatists are anti-realists. Peirce himself argued simultaneously for human meaning making as *semiosis* and for such a semiotic to be progressive. That is, he began to see reasoning (indeed, all sense-making) as part of the forward movement of the universe. On Peirce's account, human action and interpretation cannot validly be divorced from natural processes.

At least by 1907, Peirce would recognise that the end of semiosis of the highest kind is an intellectual habit, which realization may lead us to wonder whether . . . [a] . . . basic element that is active in the universe, habit-taking, is a form of semiosis, and if that is what imparts the teleological current that Peirce finds in evolution.

(Houser 2000, pp. lxxxiii–iv)

Space is insufficient here to give a full account of Peirce's thinking, but it might be illustrated by means of two simple examples. On one level, it is easy to find examples of how human response interacts and interferes with the operation of natural forces: it is a hot day, so I switch on the air-

conditioning in my office, thus reducing the air temperature and also, perhaps, releasing warming CO₂ into the atmosphere. However, this example does not serve to problematise the laws of nature in themselves. To achieve the latter would entail consideration of the limits of semiosis. A pansemiotic argument, inspired by the later Peirce, can progress as follows. If a supposedly rational human being acts, as in the above case, by responding to natural signals, and such actions impact on non-rational and even non-conscious nature, so presumably do non-rational beings. For example, as all creatures seek comfortable environments they adapt both themselves and those environments. Peirce would have been influenced by Darwin and the new theories of evolution that pointed to all natural entities developing through such environmental adaptation. On this account, it is not easy to draw a firm dividing line between the adapting organism and the environment to be adapted to: each is implicated in the other. Furthermore, the relationship of each, in relation to the other, changes in ways that often seem arbitrary. On this account, there is no absolute qualitative distinction between science and human interpretation, for each is part of the same set of semiotic processes. Furthermore, 'semiotic processes' on this account have become more than processes of conscious sign use: Darwinian adaptation is at odds with mind-body dualism.

Even within the Analytic tradition (that largely, but not entirely, eschews Peirce) there has been renewed interest in recent years in the relationship between causes and reasons, notably in the work of Donald Davidson, and then John McDowell, whose *Mind and World* (1996) is to a large extent a response to Davidson. Space here does not allow an account of either Davidson's anomalous monism or McDowell's formulation of human Second Nature. The pertinent point is that, while neither Davidson nor McDowell rejects the specialness of human nature and its operation within the 'space of reasons' (after Sellars 2008), each acknowledges that the division between human reason and natural cause is far from clear-cut: (some) reasons can perhaps be causal (in some sense). Of course, a fully naturalistic account, taking on Peirce's semiotic and evolutionary commitments, might lead one to reject the specialness of the human altogether. This position, rejected by McDowell as 'bald naturalism' (though somewhat summarily: Stables 2010), but approached by Peirce's direct heir John Dewey (e.g. Dewey 2000), would simply see human reasoning and interpretation as either the working of natural laws or as part of the ongoing work of nature that is not necessarily law-governed.

Methodological choices do indeed, as Smeyers argues, rely on where we stand in relation to these issues. However, there is no automatic either/or choice to be made between science as the clarification of the application of universal law and interpretive research as the qualitatively different exploration of human experience. Philosophers of science often

acknowledge this. Smeyers asserts “this Popperian move towards *truth*” but goes on to remind us that “no certainty about this or that could be reached” (p. X). Indeed, Popper construes scientific hypothesis as a series of attempts to falsify (Popper 1963); arguably, on Popper’s account, science can only get better at telling us what is not the case rather than that which certainly is.

Finally, it should be noted in relation to this point that Smeyers is working, as we philosophers of education tend to work, within the Western tradition, which tends to divide causation from reasoning. The Buddhist and Hindu concept of *karma*, for example, makes no such distinction. When the universe is construed as all mind, then what is experienced as matter is subject to, *inter alia*, human intentions. The Western mind-body substance dualist tradition, that owes a great deal to Plato and Descartes, separates mind from matter, and thus reason from cause, but does not enjoy universal legitimation in so doing.

To return to Smeyers’ argument, he notes that “it is at least conceivable that there are logical limits to what research may offer – which is far from saying that anything goes” (p. 68). In other words, Smeyers cautions us to acknowledge the potential limits of educational research; this point holds true even if we reject the cause-reason divide, since research can never capture the whole range of human reasoning, sense-making, or experience. In effect, he is urging us to acknowledge a degree of epistemological relativism in research though this does not necessarily imply ontological anti-realism any more than its reverse. The acknowledgement of any such relativism raises problems for researchers, however. What are the criteria that should be used to adjudicate between varying necessarily partial and inconsistent research accounts? Is educational research invalid if it cannot provide clear and unambiguous answers?

It is at this point that Wittgenstein can come to at least a partial rescue. Lyotard can take us further, but into controversial areas for researchers. Each suggests that there can be no set of overarching criteria but that new thinking in any area is analogous to a move in a game – though that move might, particularly on Lyotard’s account, modify the game itself.

The Language Game: From Wittgenstein to Lyotard

A central concern of Wittgenstein’s *Philosophical Investigations* (Wittgenstein 1967) seems to be that concepts cannot be divorced from contexts. That is, what something means, linguistically, can only be understood in terms of the ‘language game’ being played, and each language game is itself part of a ‘form of life’. To take an everyday example

(not used by Wittgenstein), ‘multiplication’ means something different used in an arithmetical context than in a non-mathematical context: when God told his chosen people to ‘go forth and multiply’, he did not presumably intend to mean ‘multiply by one quarter’. This has radical implications for the practice of philosophy itself, for epistemology and for education. For philosophers, language imposes the limits of what can be explained; philosophers, therefore, should aim to clarify how language games work and concepts work within them, as concepts cannot be understood independent of context and only the ‘that’ and the ‘how’, and not the ‘why’, of a language game is potentially explicable. On epistemology and education, the challenge is similarly stark. Consider the following:

Try not to think of understanding as a ‘mental process’ at all. – For *that* is the expression which confuses you. But ask yourself, in what sort of case, in what kind of circumstances, do we say, “Now I know how to go on”...

(Wittgenstein 1967, S154)

Understanding, on this account, involves knowing how to play specific language games. It comes from immersion in those games and not from a detached rational process of working out.

Lyotard’s adoption of the language game in *The Postmodern Condition* (Lyotard 1984) offers more radical challenges still. Lyotard argues that the modern (cf. postmodern) condition has been characterised by universal acceptance of a series of ‘grand narrative[s]’, “such as the dialectics of Spirit, the hermeneutics of meaning, the emancipation of the rational or working subject, or the creation of wealth” (Lyotard 1984, p. xxiii). One such grand narrative is that of science, many of whose adherents deny its narrativity. The postmodern condition, by contrast, is characterised by ‘incredulity towards metanarratives’ (p. xxiv) on the grounds that not only are all activities recognisable as narratives, but also none can claim universal legitimation, including science, which only permits of certain sorts of knowledge and learning. ‘Postmodern knowledge’, therefore, is not simply a tool of the authorities; it refines our sensitivity to differences and reinforces our ability to tolerate the incommensurable’ (p. xxv). It effectively replaces the *grand récits* of modernity with the *petit récits* of a culture characterised by sub-cultures. Lyotard goes on to describe the language game as his ‘method’ in *The Postmodern Condition* (p. 9ff.). As for Wittgenstein, the language game has absolute priority for Lyotard: it is ‘already the social bond’ (p. 15), while the self exists in a ‘fabric of relations’ (*ibid.*). Also like Wittgenstein, Lyotard explicitly addresses issues of learning and understanding, arguing in the chapter ‘The Pragmatics of Narrative Knowledge’ (Chapter 6, p. 18ff.) that ‘science is a subset of learning’ (p. 18) not its totality. Indeed, even science does not develop in the narrowly rational linear fashion that is sometimes claimed, but rather by

'paralogy' which 'is not under the command of the system' (p. 61). (This argument is reminiscent of Thomas Kuhn's theory of scientific revolutions: Kuhn 1996.) Science, which often seems to valorise only deductive inference, in fact relies on more than deduction itself to progress, according to Lyotard, as according to Kuhn. Put alternatively, some moves in language games change the games.

There is a serious political implication here that goes far beyond the superficial acknowledgement that scientists sometimes 'think outside the box'. A society that offers narrow scientific logic as having universal legitimation will increasingly disregard the associative, paralogical capacities of human beings in favour of the purely 'performative' intelligence of the machine. One implication, shared by many contemporary commentators, is that educational debate, starved of a recognition of cultural difference and debate over aims and values, becomes constrained into a delivery model, whereby students and teachers are merely components in a grand social machine designed to produce results in relation to prespecified criteria. Lyotard's adoption of the Wittgensteinian language game poses a set of political as well as methodological challenges for researchers.

The Other and Responsibility for the Unknown: The Case for a Postmodern Ethic in Education and Research

Acceptance of Smeyers' carefully worked argument in favour of both interpretive research and methodological pluralism rests on a prior acceptance that all research, of whatever kind, can only offer a partial perspective on reality. Why then do research at all? The answer, in part, depends on where we are to consider the power really lies. If there is some overriding single set of truths about education, then there needs to be a multiplicity of approaches to discovering it. (This position we might describe as thin methodological relativism.) If, however, there is in effect no educational grand narrative at all, then educational truths are constructed, not discovered, *inter alia*, by research. This thick methodological relativism allows for the judging of research according to its explanatory power, but this takes us little further: power for whom, and to do what?

Educational research is riddled with normative assumptions. (Not just educational research: note the recent controversies around climate change research, where scepticism is often regarded as synonymous with denial.) The questions for researchers, as for teachers and policy makers, are often of the 'how should' rather than the 'how does' variety. Research often rests on the assumption that key concepts, such as 'education' and 'learning': (a) refer to universal acknowledged human goods, and (b) have core

universal meanings. Thus they are effectively both reified and mystified (see Stables 2008). However, Wittgenstein and Lyotard show us that there is no reason to assume universal legitimation for either of these terms. To take either philosopher seriously is to call into question the normative assumptions of educational researchers, whose work as a consequence can no longer be valorised as a consequence of their commitments to absolute moral values, fixed intellectual standards, social justice, ecological sustainability or any other value system (though these things will be valorised in certain ways in certain language games). The prime motivation for researchers should not be trying to improve education or learning for all; rather, it should be firstly on clarifying concepts within language games and practices within forms of life and secondly on developing, paralogically, radical perspectives that serve to disrupt and problematise those games and forms of life. The primary focus in the first case should be on ascertaining what 'education' and 'learning' mean in particular language games: it should be descriptive rather than normative. The emphasis in the second case should be on developing alternative accounts that have explanatory power: that is, that are recognised as new without falling into the trap of assuming the possibility of a private language (Wittgenstein 1967). Neither Wittgenstein nor Lyotard supports solipsism: educational research cannot go far by simply declaring, 'I want' or even 'I think'. This is not to deny the role of theory but to acknowledge that theories inform interpretations variously. Scepticism, clarification and a spirit of play might therefore drive (even) educational research more strongly than reification and political or ethical commitment. Researchers could spend more of their time clarifying how schools actually work, for example, taking into account the perspectives and actions of all actors, rather than arguing about how they can be improved according to a one-dimensional set of performative criteria. In a rather old-fashioned way, educational researchers would be well advised to return to a more open-minded commitment to finding things out irrespective of their assumptions. On the other hand, they might also acknowledge the rich potential of unexpected connection and the potential power of the as-yet untried inference.

There may be no ultimate causes for researchers to discover in either the physical or the social sciences. It may be that education, whatever it is, is driven as much unconsciously as consciously. It may be that schools are temporary social phenomena. It may be that when different groups of people involved in different forms of life use terms such as 'education' or 'learning', they mean different things by them, and that not all of those things are desirable: it may be that even different groups within a single school differ on this. However, the powerful insights will not come from mere ambition, desperation or wishful thinking. Researchers, however, can certainly pay more attention to the *petit reçits* of individuals

and subcultures. This process of exploration and clarification might prove more richly educationally rewarding for all concerned than does much current 'educational' research. Rationalists could welcome such research because it clarifies concepts. Empiricists might value it because it respects and illuminates experience. Humanists might value it because it valorises human aspirations, and naturalists may support it because it charts adaptation. Last but not least, it can be argued that democratic governments should want to fund such research insofar as they are democrats and therefore respect, and need to hear, the voices of the people whom they serve.

Note on Contributor

Andrew Stables is Professor of Education and Philosophy at the University of Bath. He has written on a range of topics but has become predominantly interested in drawing on both Anglophone and Continental philosophical traditions to develop a 'fully semiotic' perspective that collapses the sign-signal distinction as a corollary of the collapse of mind-body substance dualism.

References

- Dewey J (2000) *Experience and nature*. Dover, London
- Houser N (2000) Introduction. In: Peirce CS (ed) *Writings of Charles Sanders Peirce: a chronological*, vol 6. Indiana University Press, Bloomington, pp xxv–lxxxiv
- Hume D (2008) *An enquiry concerning human understanding*. Hackett, Indianapolis
- Kuhn TS (1996) *The structure of scientific revolutions*. University of Chicago Press, Chicago
- Lyotard J-F (1984) *The postmodern condition*. Manchester University Press, Manchester
- McDowell J (1996) *Mind and world*. Harvard University Press, Cambridge
- Peirce CS (1878) How to make our ideas clear. *Pop Sci Mon* 12:286–302
- Popper K (1963) Science as falsification. In: *Conjectures and refutations*. Routledge and Kegan Paul, London, pp 33–39
- Sellars W (2008) *In the space of reasons*. Harvard University Press, Cambridge
- Stables A (2008) Dewey, semiosis and difference: implications for pragmatic philosophy of education. *Contemp Pragmatism* 5(1):147–161
- Stables A (2010) Making meaning and using natural resources: education and sustainability. *J Philos Educ* 44(1):137–151
- Wittgenstein L (1967) *Philosophical investigations*. Blackwell, Oxford
- Wittgenstein L (2001) *On certainty*. Blackwell, Oxford

“This Truth That I Say to You, Well, You See It in Myself”: On Research As Education | As Philosophy | As a Way of Life

11

Maarten Simons and Jan Masschelein

Abstract

The chapter develops a specific perspective for thinking about the educational potential of research, related precisely to a very specific conception of research that might be particularly important for educational research. In contrast to the common *knowledge-oriented/ based* way of doing research, the *existential-ethical oriented* way of doing research is explored. In the latter type of research, the existential and ethical conditions of the researcher are always at stake, and precisely for that reason her research is always clearly a form of self-education, i.e. research as education. Due to an existential-ethical transformation, the researcher, when speaking about her research results, can claim: “This truth that I say to you, well, you see it in myself”. The knowledge-oriented researcher makes a different claim: “This truth that I say to you, well, the method and my disinterested research attitude prove it is based on true/valid knowledge.” Elaborating on the later work of Michel Foucault, we explore the value of the existential-ethical way of doing research, suggesting philosophy of education (as a way of life) as being part of education research, and finally we attempt to reformulate the Humboldtian idea of ‘education through research’.

Keywords

Educational research and research as education • Education through research, Humboldt • Ethics and research • Michel Foucault • Philosophy of education, philosophy as education, philosophy as a way of life

Introduction: Research and Education

Investigations of educational research often concern themselves with the modalities of the research process: epistemological, psychological, deontological/ethical, sociological, financial and organisational discussions of the practice of educational research. This paper explores educational research practices in another way. Instead of ‘research *on* education’, we want to explore ‘research *as* education’ or, related to the field of philosophy of education: ‘philosophy *as* education’. The educational potential of research however, is usually either taken for granted or lost from sight.

When these issues are mentioned two (related) perspectives are usually deployed (Simons 2006; Simons and Elen 2007). We will discuss these perspectives briefly because it helps us clarify our own, third perspective on education and research, the focus of this chapter.

In the first perspective on the relation between education and research, the output of research is regarded as a valuable input for education. Research is discussed in terms of the production of knowledge and it is assumed that the distribution and transfer of knowledge towards students should function as a form of education, or at least opening up the space for learning processes; it is an input for the accumulation, change, or construction of knowledge by the student. Similarly, it is assumed that research is a form of education for the researcher herself; her research results lead to an accumulation, or at least a change in her knowledge basis.

M. Simons (✉) • J. Masschelein
Laboratory for Education and Society, University of Leuven,
Leuven, Belgium
e-mail: maarten.simons@ppw.kuleuven.be

In this line of reasoning, educational research, like all other kinds of research or academic inquiry, is a resource for students/researchers in their education.

In the second perspective, the process and practice of research is the central focus. Several voices can be heard here. First, research can be approached as the field of practice for future researchers to learn their job. Another voice suggests that the process of research, and in particular issues related to methodology, can become the inputs for students to learn research competencies in view of their future role in what today is called ‘the knowledge society’. (This voice could also be placed under the first perspective if the transmitted knowledge on research methods is the output of specific methodological research.) A third voice claims that ‘participation in research’ is not just useful for students to become future researchers, but is in itself a very particular form of ‘education’ or ‘learning process’ and leads to a kind of ‘general education’ or ‘edification’. This voice refers to the idea of ‘education through research’ as it is used within the Humboldtian tradition of the (research) university (cf. Masschelein 2004; Simons 2006). We will focus in more detail on this tradition, which ‘inspired’ the modern ‘research universities’ all over the world, because as a tradition it informs the problematic we discuss in this chapter.

According to Humboldt, the university should be a place for research (as academic inquiry) where students receive a general education through participating in its research (Humboldt, 1810/1959; Simons 2006). It is a ‘general’ type of education, according to Humboldt, because academic inquiry, and the unifying (philosophical) reflexivity that is part of it, is oriented towards the ‘universal’ or ‘the truth’ (or the ability to grasp reality in its totality). Because for Humboldt research is an endless process, it is not just the research output that is important but the research process and the research attitude (and specifically the orientation towards the truth) that is institutionalised at the (modern) university. Hence, ‘education through research’ (at the university) is regarded as the condition to bring about a (method based) ‘reflexivity’ leading to truly ‘enlightened citizenship’. Throughout the twentieth century and until now there have been attempts to actualize this idea of ‘education through research’ (Jaspers 1961; Schelsky 1979; Habermas 1990; Mittelstrass 1994), and still today universities all over the world refer to the principle of academic research as a context of and tool for academic education. Finally, it is suggested that ‘education through research’ is an ongoing principle for the academic herself – her research, and the kind of reflexivity that is asked from her, by for instance, being involved in theoretical and methodological debates, should result in an ongoing learning process.

Both perspectives, and the different voices within each perspective, seem to reveal something about the educational or learning potential of research (on education) for the

researcher and for students and society. We can rephrase this potential in view of the task of the modern research university, or the perceived role of higher education, in the current knowledge society as follows: (higher) education is based on research, and research is a process that produces valid (and reliable, relevant...) knowledge (and is hence based on scientific method and inspired by a scientific research ethos). All this might sound self-evident. And according to us, it is evident indeed as long as one approaches and practises research as the process of knowledge production and assumes a scientific reflexivity that is guided by scientific method and inspired by a disinterested or objective research attitude.

The aim of this chapter however, is to explore a third perspective to think about the educational potential of research, and related precisely to a very different conception of research – one that might be particularly important for educational research. Inspired by the later work of Michel Foucault, we want to make a distinction between a *knowledge-oriented/based* and an *existential-ethical oriented* way of doing research. In the latter type of research, the existential and ethical conditions of the researcher are always at stake, and precisely for that reason her research is always clearly a form of self-education. Self-education however, as we will clarify, does not mean an accumulation of or change in knowledge, but a reflexivity that leads to a transformation of the mode of existence of the researcher herself, and this transformation is approached as the condition for her ‘to see and speak the truth’. Due to the existential-ethical transformation, the researcher, when speaking about her research results, can claim: “This truth that I say to you, well, you see it in myself” (Foucault 2001, p. 391). The knowledge-oriented researcher makes a different claim: “This truth that I say to you, well, the method and my disinterested research attitude prove it is based on true/valid knowledge.”

In sum, the aim of the chapter is to explore a kind of research on education that implies first and foremost a specific kind of transformation of the researcher herself and leads to a particular kind of truth telling. Reformulated in a very particular and compact way, we want to indicate that research involves a kind of self-formation, and that this self-formation can be regarded as part of philosophy (as a way of life). This will help us to reformulate, at the end of the chapter, the Humboldtian idea of ‘education through research’. We are well aware that exploring this existential and ethical perspective, and thus leaving the taken for granted and familiar road of knowledge-oriented research, is risky. This attempt could indeed be disqualified in advance as ‘non-scientific’, ‘non-argumentative’, ‘not relying on a scientific method or style of reasoning’, or ‘not being motivated by a disinterested attitude’. We do have to keep in mind however, that the criteria of these judgements all rely on the knowledge-oriented/based perspective. Thus this

chapter is an attempt to question the common understanding of research and the criteria commonly used to judge research, or at least to bring about a de-familiarization of common conceptions on 'education through research'.

Access to the Truth, Knowledge, Self-Transformation

We will elaborate the alternative perspective on research and truth telling by drawing on the investigations of the later works of Foucault and particularly on his 1981–1982 courses at the *Collège de France* under the title, *The Hermeneutics of the Subject* (Foucault 2001).¹ One leading question in the series of courses where he carefully studies Greek and Roman antiquity is: how can people have access to the truth?, how can people become truth-tellers?, or what is the price of having access to the truth? (Adorno 1996, p. 122). Foucault distinguishes two traditions that answer this question in particular ways. Let us focus in more detail on these traditions.

The first tradition, which emerged in Greek antiquity and is dominant today, claims that it is 'knowledge' that offers access to the truth and that in order to have 'true knowledge', certain conditions related to the act of knowing and the position of the knower have to be taken into account. Generally speaking, two kinds of conditions for knowledge production are to be distinguished (Foucault 2001, p. 19). There are internal conditions or conditions at the level of the act of knowing, or what is called today, the 'process of knowledge construction or production'. These conditions are related to the research method or to the structure of the object of knowledge and they guarantee the 'validity' – to be understood in a broad sense – of knowledge. External conditions are those conditions that refer to the position of the researcher, but are external to the researcher herself. What is meant by this is the complex of societal or cultural rules, norms and values that are required to produce, in a 'reliable' way, scientific knowledge and to have access to the truth. An example of such cultural requirement would be being formally trained (and qualified) as a researcher, or being prepared to inscribe oneself into the consensus of the scientific community. Examples of moral conditions are: to demonstrate effort; not to cheat or be deceptive; and to find an acceptable combination of financial interests (and interests related to position and career) on the one hand, and the

norms of disinterested inquiry on the other (Foucault 2001, p. 19). These sets of conditions are, of course, not exhaustive; they have developed throughout history and various combinations between internal and external conditions can be made. What should be clear by this sketch however, is that conditions such as these determine the price that has to be paid to have access to the truth via the production of scientific knowledge.

In view of the above description it probably needs little by way of clarification that this tradition has culminated in the forms of modern scientific research and academic inquiry that rely on scientific method and a disinterested and objective research ethos, for the 'production of true knowledge'. This tradition has been institutionalised at the modern, Humboldtian research university. Perhaps due to the familiarity with this knowledge-based/oriented configuration of doing research, we lose sight that it is but one particular way of having access to the truth. Foucault helps us become attentive to another tradition and configuration.

A less common tradition claims that access to the truth requires a transformation of the self. While the knowledge-based/oriented tradition assumes that, in principle, everyone has access to truth on the basis of being a human being (at least if conditions at the level of knowledge are taken into account), the second tradition, which could be called the existential-ethical, spiritual or ascetic tradition, assumes that a transformation of the 'mode of being of the subject' is required. In line with Foucault, and contrary to our current (e.g. Christian or New Age) framings of the concepts 'spiritual' and 'ascetic', these do not refer to practices of self-denial and self-renunciation, but (in line with the classic Greek understanding of the term) to intellectual (and other) exercises or practices "whose special role is to permit attention to and transformation of the self" (Hunter 2001, pp. 21–22; cf. Rabinow 2003, p. 8). From this viewpoint, and unlike in the first configuration, there is no access to the truth without transforming oneself.

Thus, in both traditions and configurations of inquiry and doing research, people have to meet certain conditions or have 'to pay a price' in order to have access to the truth, but the conditions and price differ: either a transformation of the self, or conditions related to knowledge. It will come as no surprise that we argue that it is interesting to look at research (on education) that is part of the existential-ethical configuration, and to regard the transformation of the self as the ('educational') price that the researcher has to pay in order to have access to the truth, or to become a truth-teller.

We want to stress that today the existential-ethical configuration does not exist, or at least not in an institutionalised form. Thus, in referring to the existential-ethical configuration, we do not have a perspective at hand that has developed in a similar way as, at the same level of, or alongside the dominant knowledge-oriented/based tradition (institutionalised and

¹ This essay can be read as an attempt to apply Foucault's courses at the Collège de France, that are published as 'L'herméneutique du sujet', to educational research (Foucault 2001). In this essay we (mostly) refer to the original French version of the work of Foucault and use our own English translation.

configured at the university). It is a tradition that lives instead in its shadows and margins – not necessarily outside the university but certainly not having a central position. As long as educational research is mainly knowledge-based/oriented, and as long as the dominant academic tradition reconfirms its exclusive position by telling stories about its own great origins (in terms of the emancipation from ‘spirituality’), the existential-ethical tradition will not only continue playing a marginal role but will also continue to be disqualified for being ‘not scientific’, ‘not academic’, and for producing knowledge and understanding that is not according to the ‘internal and external conditions of true knowledge production’.

In short, the existential-ethical tradition we want to focus on seems to permanently run the risk of being disqualified for having missed (or ignored) “Enlightenment” and “humanity’s passage to its adult status” as led by true reason and by scientific method and rigor. At this point, and in line with Foucault, it is important to refuse the “blackmail of the Enlightenment”, that “you either accept the Enlightenment and remain within the tradition of its rationalism (. . .); or else you criticize the Enlightenment and then try to escape from its principles of rationality” (Foucault 1997/1984, p. 313; cf. Osborne 1998). Resisting this blackmail thus implies resisting any marginalizing of research and truth telling in the name of an assumed “universal rationality”. Instead, what we want to indicate is that the existential-ethical tradition is also related to ‘enlightenment’ and ‘rationality’, although not precisely in the way the (universal) knowledge-oriented/based configuration has in mind. However it is not our aim to transpose ideas, concept and practices from Greek antiquity to our society today. The foremost aim is the creation of new spaces to breathe and the modest announcement of possibilities for a ‘coming tradition’; an attempt (or ‘essay’) to open up a space to reflect upon the value of the spiritual tradition, and on the value of another kind of ethics, truth and enlightenment than is consolidated within the common knowledge-based/oriented configuration. In order to be as precise as possible about our perspective, some further preliminary remarks are required.

Enlightenment, Ethics, Spirituality

First, let us take how one approaches ‘enlightenment’ as a point of departure for clarifying our argument. At stake is not the relation between knowledge and truth (or enlightenment based on true knowledge) but the relation between ethics and truth. In other words: in the knowledge-based/oriented tradition the subject is regarded as someone who is *a priori* capable of having access to the truth and only *additionally* an ethical subject who can and should know what to do (Gros 2001, p. 504). The basic assumption is that

everyone (in principle) can obtain knowledge, and based on this knowledge that everyone is in a position to know what to do (be it technically, politically or ethically). It is in accordance with the dominant modern way of understanding enlightenment (and probably ‘The Enlightenment’) as the transition from a state of dependency or heteronomy (‘dark ages’ or ‘oppressive dogmatism’ and ‘enslaving tradition’) to a state of independency or autonomy guided by the principles of (universal) reason that is incarnated in true knowledge (of ourselves, others, and the world). In the second tradition, the ethical work of the self, on the self, and a transformation of oneself, are the main conditions to having access to the truth and to being ‘enlightened’.

Second, the term ethics has to be distinguished from terms such as morals and morality (Foucault 1984a). The latter term refers to a set of rules, norms and values of just behaviour. The term ethics refers instead to the relation of the self to the self and how this relation is modified or transformed by the self in order to become an ethical subject; that is, a subject of action (and not merely a knowing subject). In line with Foucault (and his genealogy of ethics in Ancient Greece), the domain of ethics understood in this way can be referred to as a field of practices related to ‘care of the self’ and ‘self-mastery’ (Foucault 1984a, b, 2001).² The relation of the self to the self, as we will indicate further on, is a relation of ‘care’ and not a relation of ‘knowing’; one has to look at the self not as an ‘object of knowledge’ but as a ‘matter of concern’ and ‘care’; and the point of departure is not oneself as a ‘knowing subject’ but as an ‘ethical subject of action’. In the existential-ethical tradition, this care for the self is a prerequisite to having access to the truth. What is at stake are the existential conditions at the level of ethics (and related to one’s existence), and not merely internal or external conditions at the level of knowledge.

Third, the Foucauldian focus on the ethical, spiritual level and the relation of the self to the self in research also means that the concept of ethics has to be distinguished from concepts and ideas introduced by other contemporary (French) philosophers that stress the relation with the Other

² For the ancient Greek the context of this idea of care of the self is the problem of finding and describing an ‘art of living’ or ‘technique of existence’ (*tekhnê tou biou*). Care of the self is a general principle to develop a kind of ‘*tekhnê*’ or art of mastering the self, others, or life as such. While initially this principle and the art of existence were located within the domain of education (the preparation of governing others and often to compensate for the lack of adequate education), in the Hellenistic period it gradually becomes a prescript for the whole of life (Foucault 2001, pp. 428–430). These ideas and their subtle transformations have been discussed in detail (cf. Adorno 1996, pp. 119–138; in the field of education: Peters 2003; Peters and Besley 2007). Here we focus on what is at stake in this caring relation of the self at a rather general level.

in their approach of ethics. These philosophers focus, each in their own way, on the limits of knowledge (representation and language), on ethics (as an unconditional, infinite relation of responsibility to the Other) that precede ontology (the totality of being) or on justice as an unconditional condition of truth (Lyotard 1983; Levinas 1991; Derrida 2001; cf. Biesta 2003; Standish 2002). It is not the aim of this chapter however, to discuss at a theoretical level the differences between Foucault on the one hand and other theories of ethics on the other hand. For present purposes it should be sufficient to indicate that we discuss ethics at the level of the immanent relation of the self to the self – the work of the self upon the self and its influence on the mode of being of the subject – and not at the level of a fundamental relation of transcendence (towards the Other) that ‘works’ on the self and transforms it into a subject of responsibility.

Fourth and finally, the exploration sometimes comes close to discussions of the idea of spirituality in education (cf. Carr and Haldane 2004; Carr 2004). Our focus however is mainly spirituality at the level of educational research (as access to the truth) and how a particular kind of existential-ethical formation can be regarded as the condition to speak the truth. Our main point of reference is not Aristotle as is common in the discussion on spirituality in education, but Socrates. Aristotle, as Foucault reminds us, was a kind of exception in Antiquity because he, indeed being called ‘the philosopher’, favoured a ‘philosophical’ (and knowledge-oriented) approach (‘how to have access to the truth?’) to questions related to ‘spirituality’ (‘what transformations are necessary to have access to the truth’) (Foucault 2001, p. 18). In Antiquity, ‘philosophy’ was principally a ‘way of life’ – as more clearly exemplified by Socrates than Aristotle – without a sharp distinction between spirituality and philosophy (cf. Hadot 1995; Hogan 2003). Hence it comes as no surprise that Aristotle, and the focus on knowledge (instead of spirituality), is often regarded as the founder of modern philosophy. In a way, Aristotle inaugurated the knowledge-oriented/tradition, and marks a point where the spiritual tradition started to lose its importance. By drawing upon Socrates it is our aim to highlight what is at stake in the spiritual tradition, and to open up a space to think of research on education in another way, that is, research *as* education. We will start with opening up this space with a short excursion on Socrates, care of the self, and having access to the truth.

Care of the Self, Mastery Truth-Telling

In the *Alcibiades*, Socrates invokes the eponymous young man to take care of the self before even starting to thinking of taking care of others (and being, for example, politically active) (Foucault 1995, pp. 44–51). This call to take care of

the self and to be concerned with oneself is not the opposite of taking care of others (as we are inclined to think today), but is regarded as its very condition. For the ancient Greek, the context of the idea of care of the self is the problem of finding and describing an ‘art of living’ or ‘technique of existence’ (*tekhnê tou biou*). Care of the self is a general principle to develop a kind of *tekhnê* or art to master the self, others, or life as such. While initially this principle and the art of existence were located within the domain of education, in the Hellenistic period it gradually becomes a prescript for the whole of life (Foucault 2001, pp. 428–430). These ideas and their subtle transformations have been discussed in detail (cf. Adorno 1996, pp. 119–138; Peters 2003; Peters and Besley 2007). Here we want to focus on what is at stake in this caring relation to the self at a more general level.

First, the care of the self involves a kind of attitude, that is, an attitude of the self to the self, as well as to others and the world (Foucault 2001, p. 12). Furthermore, this attitude is characterised by attention: to be attentive to the self, others, and the world. This attention involves concentration or focus on the self, and particularly on one’s own thinking and doing. Finally, care of the self implies actions upon the self that aim at a transformation or conversion of the self. These actions are part of particular exercises (purification of one’s thoughts, memorisation, meditation, writing (letters), reading. . .) done to work upon the self and to transform the self. The notion *ascesis* originally refers to these ‘technologies of the self’ (McGushin 2007). As mentioned earlier, it should again be stressed that *ascesis* did not originally imply a self-examination (in view of self-knowledge) that led to a kind of (Christian) renunciation of the self (as a function of an ascetic life). Instead, these technologies explicitly referred to an active working on, and transformation of, the self. One such type of practice has to do with exercises of thought upon thought or reflections upon one’s own thinking – in short, a ‘mode of reflexivity’. At this point it is important that Foucault reminds us that throughout Western history different forms of reflexivity can be distinguished (Foucault 2001, pp. 441–442). With reflexivity being defined as exercises of thinking where thinking itself becomes an object of thought, Foucault distinguishes between at least three modes of reflexivity: memory, meditation, and method (cf. Rabinow 2003, pp. 8–9).

In memory (and in an exemplary way elaborated by Plato), the past is approached as the bearer of the truth and the past is what has to become present in memory. The truth is thus available in and for everyone, yet it has to become present reflexively through the act of remembering. Memory as form of reflexivity is also a main component of particular religions that regard the tradition (and remembering of the beginning) as the source of truth. Method, and Descartes is exemplary here, included searching for fixed criteria and procedures in order to organise or produce truth as a system

or field of objective knowledge. The modern researcher, concerned with her disinterested position toward the facts and applying methods, relies on a methodological form of reflexivity. This form of reflexivity is characteristic of the knowledge-oriented/based tradition, and also describes the base feature of the current academic fabric of educational research. In contrast, the form of reflexivity typical for care of the self is ‘meditation’, not in view of self-knowledge and self-renunciation (or self-discovery), but in view of testing whether what one does is in accordance with what one thinks (Foucault 2001, p. 442). The goal of the care of the self, through an attentive attitude and exercises such as meditation, is an ‘art of existence’ to master the self in a spiritual/philosophical way of life.

Although different approaches can be distinguished, generally speaking self-mastery implies that one’s deeds and thinking are in accord, that is, someone shows in her deeds what she thinks and says. Someone masters the self when she is capable of ‘just’ or ‘right’ actions. However, ‘just’ or ‘right’ do not refer – as in the knowledge-oriented/based tradition – to actions and thoughts that meet the criteria of valid knowledge. The criteria for ‘being just’ and living a ‘true life’ are not to be located at the level of knowledge, but at the level of someone’s behaviour and actions. Someone is recognised and acknowledged as a truth-teller when she expresses or demonstrates mastery and when there is a kind of relation of rectitude between one’s deeds and words. Therefore, the (recognition of the) position of truth-telling is not related to the internal and external conditions of knowledge production but to existential-ethical conditions. By now it will hopefully have become clear that knowledge and truth should be approached in a very particular way.

The relation and attitude of care is regarded as (ontologically) fundamental and the role of knowledge is situated at the level of this relation of care (Foucault 1984b). What is at stake is a transformation of the self that aims at self-mastery and this mastery expresses itself in a kind of ‘assimilation’ or ‘incorporation’ of true knowledge into principles of action. Self-mastery, therefore, is a state in which one has access to the truth and in which this truth has a function of ‘enlightenment’; it transforms the subject in its way of being or it saves the subject. As a consequence, someone who masters the self is someone whose life is a ‘true’ life or a life inspired by truth; who actualises truth in her life and during her whole life; whose life is animated by truth. Truth is thus a ‘reason for living’, the *logos* that is actualised in existence and that animates, intensifies and proves life – it is what ‘verifies life’ (Gros 2001, p. 510). Thus the master is living a kind of ‘researched’ life, and in this research (based on meditation) one’s existential-ethical condition is always at stake. Due to this rather specific configuration of truth and knowledge, education and truth telling also receive a particular meaning in this configuration.

Research as the ‘verification of life’ clearly has an educational meaning for the researcher herself; education however, needs to be understood not as an accumulation or change of one’s knowledge, but as a form of self-transformation. Moreover, the ‘master who masters the self’ also has an educational relevance for students or for society. Again, this relevance is not to be situated at the level of knowledge distribution or transfer. Instead, the master – and Socrates is exemplary here – invites others to take care of themselves, to establish an attentive attitude and relation of care to the self, to work on the self and ultimately to master the self (Adorno 2002). In this ‘pedagogical’ relationship, the master who lives a researched life does not regard herself as someone who helps pupils to have access to the truth by offering knowledge (or knowledge about how to have access). The true life of the master instead functions as a kind of ‘touchstone’ or ‘test’ for others to use to evaluate to what extent they have mastered the self, to what extent their knowledge and actions, their principles and actual deeds are in accordance or whether they are capable of ‘just’ action. The ‘test’ therefore, is not used to determine whether others have valid knowledge (and have access to the truth based on this knowledge), but instead functions as an instrument of meditation.

Central to this relation between the master and the pupil is *parrhesia* or free speech – speaking openly and frankly on issues that are of public relevance even if one’s own life is at risk, the latter being precisely an indication that one is ‘truly’ critical (Foucault 2001, p. 388; cf. Foucault 2004; cf. Peters 2003). The parrhesiast is someone who is present in what she is saying. It is someone who lives and acts as truth wants her to act and therefore her truth-telling implies a correspondence between the ‘subject of speech’ and the ‘subject of action’. This engaged speech, or this speech in which the subject that speaks commits herself to the truth, articulates courage and a kind of freedom or independency. This attitude of independence and criticality is what the master articulates when she says: “this truth that I say to you, well, you see it in myself” (Foucault 2001, p. 391). It is someone who, in a specific way, has everything to lose (and puts herself at stake) and nevertheless feels a duty to speak truth (to power). She is not saying: ‘this truth that I say to you, well, the method and my disinterested research attitude prove it is based on true/valid knowledge.’ Hence, truth telling for the parrhesiast relies on existential-ethical conditions; the ‘validity’ of *parrhesia* is based on the correspondence between one’s actions and truth, and not on the criteria of valid knowledge. And again, this intimate relation proves that someone has access to the truth. In relation to this kind of pedagogic truth-telling, the pupil is in a position of ‘fertile silence’ and is invited to take care of the self and to become herself a subject who is able to master the self and to tell the truth (Foucault 2001, p. 350). The independency of

the master, to which the pupils are exposed, guarantees the autonomy of the latter in a certain way because the pupils' caring relation to the self is the limit of the master's pedagogical intervention. In short, 'parrhesiastical education' is critical truth-telling in the name of care of the self and not in the name of valid knowledge (cf. Peters 2003, p. 219). It is an invitation to take care of the self and to become attentive for the self, and is based on research as meditation.

Knowledge Based/Orientated Educational Research

This historical excursion addresses issues that are, perhaps, far removed from our goal to explore an alternative way of thinking about the relation between research and education, and particularly about research *as* education. However, we do think this sketch opens up some space and offers us some tools to think in another way about the topic. We will develop this perspective in two steps.

First, we will reformulate the common way of reflecting on the relation between research and education (that is, the knowledge oriented/based configuration elaborated earlier) contrasting this with, and using the language and concepts of, the existential-ethical configuration sketched briefly in the previous section. This step should help to clarify that the common understanding of research and education are not self-evident.

Second, we will illustrate in the next section a version of the existential-ethical tradition by discussing the work of Foucault as a mode of doing research. Indeed, according to us, his work exemplifies (without being the only representative) a kind of research that is at the same time a process of education. In other words, in his work, self-education, philosophy, and research seem to be integrated.

In the knowledge-based/orientated configuration, research on education (learning, teaching. . .) is approached as being supportive of the training of practitioners (teachers, educationalists, adult educators. . .). Research here is regarded as what offers knowledge in order for students to become experts in education. Instead of mastery (and care of the self), expertise seems to be the highest level of performance in this way of thinking. Practitioners are experts if (and as far as) their interventions are based on valid knowledge. In expertise, and contrary to mastery, the relation of the self to the self is a relation of knowledge; the expert knows what to do and how to do things. In view of this, educational research is about producing knowledge that leads to expertise. Thus, educational research (and its internal and external conditions) is the price that the researcher pays to have access to true expertise, and to support others (students) in becoming experts (in teaching, training, and so forth).

The researcher, as well as the expert, does not have to meet any ethical-existential conditions. In other words, the mode of reflexivity (and the way she thinks about her own thinking) is different from that of the master; expert reflexivity is not determined by meditation, exercise, or test of the self, but by method and taking up a position of neutrality or objectivity (Foucault 2001, p. 442). What is at stake in this knowledge-oriented/based form of educational research is the ongoing development, or innovation, of the knowledge base for experts in the field of education. In this way of thinking the educational researcher is in a rather particular way a 'test' (for students and practitioners). It is not her truth-telling and the way she verifies her life that functions as a 'test' or 'touchstone' for students and practitioners, as it would be in the existential/ethical way of thinking. Here the principle of 'test' is located at the level of the research results she transmits, and foremost at the level of the criteria (internal and external conditions) for valid and relevant knowledge production and expertise. In this configuration, the practice of education, and practitioners, in one way or another are always being tested. In her truth-telling, the researcher takes a critical-judgemental, objectifying stance (towards the field of education, towards education as a practice), and asks (future) experts to develop and take a similar stand. The truth of what she says resides in her methodology, research attitude, and proof, not in who she is or in what she (existentially, ethically) stands for. Relying on educational research, the researcher/lecturer launches a stringent call to be an expert and to learn to know and judge one's knowledge-based expertise. It is not an invitational call to take care of the self.

Both the researcher and expert regard themselves in this configuration as agents of enlightenment. Enlightenment here is not about a kind of (existential/ethical) conversion, but a process of knowledge based emancipation. As a consequence, the truth telling of educational researchers and experts always has an 'enlightening' role for the practise of education and educational practitioners; and it always has a 'critical dimension' for practitioners because they are approached as not having paid the price that real experts have paid in order to get access to the truth. Implicitly or explicitly, the practice of education here is always addressed as a 'dark place', assumed to be guided merely by 'personal opinion' and to be waiting for enlightenment based on true expertise. 'Critical' in this configuration thus refers to the conditions of knowledge production, and includes always a judgemental attitude towards (practitioners') knowledge that has not paid this price (for example, knowledge based on experience, mere opinion, conceptions of faith and belief, lack of knowledge, or blindness) (cf. Masschelein 2004).

The previous discussion is mainly about (empirical) research on education. However, the dominant practice of

philosophy of education is part of the same knowledge oriented/based configuration. Part of this configuration is a kind of ‘supplementary’ educational inquiry or ‘meta-reflection’ that regards educational research (expertise) itself as an object of knowledge (Hogan 2003; Smeyers 1999). It is a ‘critical’ philosophy of education in a Kantian tradition, focusing on the internal conditions (philosophy of education) or the external conditions (critical theory, sociology (of knowledge), ethics of science, etc.) for the valid production of knowledge on the field of education. It is a philosophy focusing on the assumptions, guidelines, limits, concepts and language of others. This kind of philosophical inquiry ultimately dreams of delivering a kind of ‘(universal) handbook of (educational) reason’ enclosing knowledge about the rules and limits that have to be taken into account for valid knowledge production, or with an explanation of why and how human beings as subjects of knowledge can have access to the truth (Foucault 1997, p. 308). By nature of their objective this kind of philosophical inquiry and these ‘handbooks’ perceive themselves as being fundamental for empirically-oriented researchers (for example, developing for them a kind of ‘scientific deontology’) and indispensable for the training of future educational researchers and practitioners, who generally share this view.

This reformulation of research in the knowledge-based/oriented configuration can be summarized as follows: educational research and educational inquiry, and theory in general, refer to the time and space of knowledge production and knowledge-based judgement that is imposed on the practice of education in order to improve it on the basis of valid knowledge and expertise. This summary brings us to the description of the existential-ethical configuration: here educational research or educational inquiry, and theory in general, refer to the time and space of care, mastery and free speech that are offered in the practice of education in order for practitioners to have a touchstone to take care of the self. In the section that follows we limit ourselves to a description of some general traits of the existential-ethical configuration, or more precisely of what could become a configuration, because it currently stands in the margins of the academic world. These traits will not be listed and described as such, but be explored by focusing on a kind of research that articulates the ‘spirit’ of the existential-ethical configuration: the Foucauldian ‘ontology of ourselves’. There are probably other versions, and it is important to note that it is not our aim to justify Foucault’s work (‘ontology of ourselves’) based on other work by Foucault (‘his work on truth, care of the self’). The main aim is to illustrate what is at stake in the existential-ethical configuration, and in particular, to indicate that it could be meaningful (despite its marginality) to explore this type of educational research.

Ontology of Ourselves

Foucault described his own work at various occasions as an ‘ontology of ourselves’ or an ‘ontology of the present’. Here we will collect some fragments of these descriptions in order to indicate that such an ontology is a kind of research that includes a form of education; that is, it includes an existential-ethical transformation of the researcher. This is to say that the form of reflexivity of the researcher is not determined by (intellectual) method. Research here is not guided primarily by conditions and criteria of knowledge production, or knowledge about fixed norms – including a *judgemental attitude* (based on criteria of validity) – and hence, this research should not be ‘judged’ in view of lacking such an attitude. The researcher’s reflexivity instead takes the form of ‘an exercise of thought’ in view of exposing one’s thoughts (and what one’s is taking for granted), and this supposes an *attentive attitude* to the present, of which the researcher herself is part. Thus the main concern is the present. It is however, important to stress what is meant with ‘concern’ and the ‘present’. The present is not that which appears as such, and before us (the present as an object of knowledge), neither as what appears from a longitudinal or temporal approach (the present between a past/tradition and a future). The present, instead, is what is experienced when we are attentive or when we are ‘present in the present’ (Foucault 1997/1984). Hence, the present is what is ‘actual’ for us today.

In view of this relation to the present, the type of research question guiding the ontology of ourselves has the resulting form: who are we today, including me as researcher, and what is distinctive and singular in our current understanding of who we are? It is a question about ‘our ontology’, that is, about what we are in the sense of what we take for granted about our being today. However, such a question is always very specific. It is a question that should articulate the distinctiveness of our present. Foucault himself, for instance, studied ‘sexuality’ (Foucault 1984a, b). His question however was not ‘what does sexuality mean today?’, but ‘why do we today refer to sexuality as something that reveals something about who we are, and why do we regard sexuality today as what for a long time has been oppressed but what should be liberated?’. His question is not whether sexuality is indeed a fundamental drive, and/or whether an oppressed sexuality leads to frustrations of all sorts. Instead he wants to know for which ‘we’ thinking in terms of sexuality about one’s inner self (and in terms of oppression and liberation) became evident. In other words, his point of departure is that sexuality (and related discourses) became important, or ‘essential’, at a particular moment in time, that this has not always been the case, and thus that it is important to study

'for who' (in what context, in what social order) sexuality became (experienced as) essential.

To be able to ask such a question (and to put something that is evident, including one's own subjectivity, at stake) implies a particular 'care of the self' or 'work upon the self' from the part of the researcher, focusing on how 'the self' is part of the present (the current way of acting and thinking). Although these questions aim at finding knowledge (who are we?), the underlying attitude is an attitude of attention or care and not an attitude of knowing or judging. It is the notion of 'curiosity' that captures very well this attitude of care towards the present (cf. Rajchman 1991, p. 141). Curiosity, as Foucault explains, is not to be situated at the level of knowledge and the ongoing assimilation of what is proper to know. Curiosity is about care from the Latin word 'cura' that is still part of 'curiosity' and the French word 'curiosité' (Foucault 1980, p. 108). An attitude of care or curiosity encloses a concentrated, accentuated gaze on what is happening today in education, what is happening with us in the world, and a willingness to become a stranger in the familiar present, to regard who we are and what we do – and what we regard as our foundations – as no longer [self-]evident. As such, curiosity combines both distance (towards oneself in the present) and vigilance (cf. Gros 2001, p. 512).

Driven by this curiosity towards the present, the ontology of the present could be regarded as embodying "an attitude, an ethos, a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them (de leur franchissement possible)." (Foucault 1997/1984, p. 319). Hence, the attitude at stake combines a 'limit-attitude' and an 'experimental attitude'. The limit-attitude refers to becoming sensitive to what presents itself as a necessity nowadays in order to explore a possible transgression of these limits. Critical work here refers to the work that is done at the limits of ourselves and our present: "(...) It will separate out, from the contingency that has made us what we are, the possibility of no longer being, doing, or thinking what we are, do, or think. (...) it is seeking to give new impetus, as far and wide as possible, to the undefined work of freedom" (Foucault 1997/1984, p. 316). But this limit-attitude should at once be combined with an 'experimental attitude' or an attitude that seeks to transform or modify one's mode of being and how one lives the present. As such, the ontology of the present also involves an experimental work of the self on the self, and this work done at the limits of ourselves must "(...) put itself to the test of reality, of contemporary reality, both to grasp the points where change is possible and desirable, and to determine the precise form this change should take" (Foucault 1997/1984, p. 316).

It is interesting to relate the way Foucault describes this limit attitude and experimental attitude to how he looks at

his own work. Being asked what writing and doing research meant for him, Foucault states his studies and books work as experiences, and that throughout his studies and writings he is transforming himself: "What I think is never quite the same. (...) for me my books are experiences (...). And experience is something that one comes out of transformed" (Foucault 2000, p. 239). The term experience is important here, and is related more specifically to 'putting something to the test'; that is, putting oneself and one's thinking to the test. Because 'experience' is his main focus, he is very clear about what how he looks at himself: "(...) I am an experimenter and not a theorist. I call a theorist someone who constructs a general system, either deductive or analytical, and applies it to different fields in a uniform way. That isn't my case. I'm an experimenter in the sense that I write in order to change myself and in order not to think the same thing as before" (ibid., p. 240). Hence, for Foucault a theorist is not someone who writes in order to change herself. The theorist is someone positioned within the knowledge-oriented/based research configuration. The theorist is someone who does not put her own thinking and own mode of being to the test. Instead, one could say that in view of knowledge accumulation and innovation the theorist puts reality to the test using her carefully constructed system. Later in the interview Foucault says that theorists deliver us 'books of truth' or 'books of demonstration', while he regards his books as 'books of experience'. The experience Foucault has in mind is a process of de-subjectivation; that is, throughout his studies and through writing his books he becomes someone else. His work is not 'about' personal experiences (stories about one's personal experience with madness, prison, sexuality) but inspired by them. His work is directed at finding a point at which one can no longer relate in the same way to one's opinions and perceptions (regarding madness, prison, sexuality).

This explains why Foucault refers to the critical ontology of the present as a kind of 'essay'. An essay – as the French word 'essayer' or 'to try' indicates – is a careful attempt to modify our mode of being in the present. It is a "transforming test of oneself in the play of truth" or an "*askesis*, an exercise of the self, in thought" (Foucault 1984a, p. 15). Again, it is important to stress that the researcher's relation of the self to her present self is a relation of care and not a relation of knowledge. In order to answer the questions of 'who are we, we who...?', and so on, knowledge is of course required, but it is a particular kind of knowledge having a particular function. The value (and 'validity') of this kind of knowledge does not reside in its conformity with scientific method, but in its usefulness for the care of the self and for the self-mastery that one aspires. As such, it should be labelled as 'experimental knowledge' for the self. It functions as a kind of touchstone to test whether it is still possible to take care of the self in the

present and to establish a relation of rectitude between what one does and thinks. Thus the ontology of the present is on the one hand a work of ‘de-subjectivation’, but on the other hand an attempt to take care of the self in view of self-mastery. Hence the ethics implied does not aim at a withdrawal from the world, but its aim is to ‘live the present otherwise’ (Foucault 1979, p. 790). Finally, we will focus briefly on the truth-telling that is based upon an ontology of the present, and on its educational dimension.

Ontology of Ourselves as Education

In order to add some words on the particular kind of (self-) education that is at stake, it is important to recall the major importance of curiosity. It is a curiosity that is related to an experience of ‘deconversion’ or a loss of assurance or certainty as to who we are or have to be today (Rajchman 1991, p. 141). In other words, it is a curiosity that assumes that it is not knowledge (and its conditions) that guarantees access to truth but care of the self and a modification of the self. In view of this, being engaged in the ontology of the present is not about wanting to produce, accumulate, and transfer knowledge, but to live a true life and to be a ‘touchstone’ for others to take care of the self and to live a true life oneself. Hence, in her truth-telling the researcher addresses others (readers, students) not as subjects of knowledge (in need of a ‘handbook’ on educational research methods, for instance) and does not judge their involvement in education matters (based on true knowledge). The ontology of the present in an existential-ethical tradition does not assume a kind of truth-telling that addresses people as (potentially) intellectual beings that should become enlightened by valid knowledge for better understanding, neither are these studies addressing human beings as in need of (practical) knowledge that is useful for better action.

Here, it is important to recall that Foucault is an experimenter and not a theoretician, and regards his books as ‘books of experience’ and not as ‘truth books’ or ‘books of demonstration’. The latter want to pass true knowledge to readers by way of demonstration; the writer is focused on argumentation and proof. Hence, the theoretician regards the readers as being in a state of ignorance about a particular subject, or as an audience that has to be convinced (based on a careful demonstration of the truth). The theoretician, by using her truth books, thus is in a particular way a ‘teacher’; someone who claims a position of authority based on her access to the truth and transferring knowledge to others in order that they may have access to the truth as well, and thus know how to think about a particular knowledge. In describing his own position and books, Foucault makes the following remark: “I don’t accept the word ‘teaching’ (...), my books don’t exactly have that value [method, demonstration, lessons]. They are more like invitations or public gestures”

(Foucault 2000, p. 245). The experimenter invites people to read a book of experience in order to transform oneself, that is, one’s relation to oneself and to the topic under investigation. It is not a ‘lesson’ based on ‘authority’, but an ‘experience’ based on an ‘invitation’; not a kind of ‘intellectual service’ but a ‘public gesture’. In view of that invitation and gesture, readers are not really addressed as subjects of knowledge (in need of true knowledge about a particular thing), but are invited to ‘have’ an experience. This experience, of course, does not tell the readers how they should think about a particular thing, but leads to a kind of de-subjectivation due to the fact that they are no longer able to relate in the same way to that thing.

Based upon an experiment of oneself in the present, the truth-telling and true knowledge functions as a ‘book of experience’ or a ‘touchstone’. That is, it can be used as an experiment or test by others in their care for the self. In this context, Foucault’s claim that ‘knowledge is not made for understanding; it is made for cutting’ is illuminating (Foucault 1984c, p. 88). The contrast here is between understanding as about accumulating knowledge, or including new experiences and ideas, whereas cutting refers to the (indeed, almost physical activity of) questioning of who we are and what we regard as fundamental in our understanding of ourselves and the world. It is about cutting into our educational present and how we live the present. Knowledge that cuts ‘introduces a discontinuity’, or works similar to a process of de-subjectivation (ibid.). In other words, it opens up spaces to take care of the self, to ‘live the present otherwise’. This brings us, finally, to the educational dimension of the ontology of ourselves.

Being engaged in the study of the present, of which one is partaking oneself, means that research is always a kind of education or ‘pedagogy’ or ‘self-study’ for the researcher herself (cf. Rabinow 2003, p. 9). However, it is important to stress that education or self-study should not be framed within the knowledge-oriented/based configuration. Instead of looking at education as an activity of knowledge transfer or accumulation, it could be regarded as ‘work on the self’ and hence opening up space to take care of the self through limit-experiences or processes of de-subjectivation (cf. Masschelein and Simons 2002). It is this experimental self-study which is included in the ontology of the self.

The ethical-existential transformation is the condition to become – as a ‘touchstone’ or through one’s ‘book of experience’ – a teacher or truth-teller for others as well. Here, educational truth-telling takes care of others, not, however, by telling them what to do (based on true knowledge) but by opening up spaces to take care of oneself and to verify one’s life.

The term ‘experience’ in ‘books of experience’ refers to the books’ ‘de-subjectifying’ – and in that sense also ‘educational’ – force in at least two ways. Firstly, they are an experience for the writer and researcher herself, as explained earlier. Secondly, they can function as experiences for the

readers: "to read it as an experience that prevented them from always being the same or from having the same relation with things, with others, that they had before reading it" (Foucault 2000, p. 239). In short, Foucault doesn't want to prove something, does not want to teach his readers a lesson, but wants to invite us to have an experience in relation to specific topics under investigation, an experience that puts not just the common knowledge of himself and his readers, but actually their subjectivity, to the test. Then, and we use the term that Foucault uses in relation to his own work, the ontology of the present is a kind of 'public gesture'.

Due to the public dimension of these gestures, the ontology of the present, and the implied existential-ethical transformation, is not merely a private matter and about personal aesthetics. The care of the self, and the concern for the present, is not a private or a-social activity, but includes a relation to an 'us' and to 'our present' (see also Gros 2001, pp. 518–519). What is opened up by questioning the present ('who are we, we who...?') is a perspective on a possible future 'we' and on a future relation of oneself to that 'we'. Due to this point of departure ('our present', 'ourselves') the gestures resulting from the ontology of the present will always be *public* gestures; not just because these are gestures to the public of contemporaries, not only because they articulate something of public concern, but foremost because throughout these gestures 'public issues' are created. Indeed, by relying on the existential-ethical work of the researcher the ontology of the present could be regarded as an attempt, and we rely for this on a formulation of Bruno Latour, to 'make things public' (Latour 2005; Latour and Sanchez-Criado 2007). Making things public, in line with Latour, is not about formulating (like in the knowledge-based/oriented configuration) 'matters of facts' that should lead to a public agreement or understanding in view of knowledge-based/oriented political reform or resistance. Making things public, instead, is about 'matters of concern' and their becoming public correlates with the constitution of a public, that is, people invited to share these concerns. In this regard, Foucault's work on 'madness', 'prisons' and 'sexuality' contributed in one way or another to transforming these issues into matters of public concern. Making things public (as matters of public concern) is thus the result of existential-ethical work on the self that breaks open the common horizon of our self-understanding and taken for granted practices (that is, what 'we' regard as 'matters of fact'), and hence transforms them into 'matters of concern'.

Philosophy as Education as Research, Laboratory Work

In view of the previous sketch, the ontology of the present can be regarded as the integration of philosophy (as a way of life), research (as questioning and studying ourselves), and

education (as a self-transformation and invitation towards others). Although we rely on Foucault for both analysing educational research and offering an example of an alternative kind of educational research, we think there are, and could be, other versions or approaches articulating (or 'configuring') the existential-ethical configuration. Instead of exploring in more detail the features of this configuration, we opt to conclude this chapter by exploring what could be at stake when elaborating this configuration.

First, we think this could help us reconsider some issues related to the university and kinds of educational research (for instance in Departments of Education). Here we can realign with the ideas of Humboldt, or at least his concern. Although Humboldt and his research university could be regarded as the total institutionalisation of the knowledge-oriented/based configuration, at the same time his *concern* at the beginning of the nineteenth century could be regarded as being typically part of the spiritual tradition (Humboldt 1810/1959).

At the beginning of the nineteenth century Humboldt was confronted with the oddments of the old, medieval university that mainly focused on (scholastic) higher education. Sciences, and in particular modern, systematic inquiry based on method, flourished outside the university. His plan (for the university of Berlin and highly influential in the Western world) was to integrate research into the university and to reorient higher education at the university by making modern research its basis. It is this birth of the modern research university that regards students as researchers and thinks of education as participation in research. What takes shape here is the modern version of the knowledge-based/oriented configuration of research and the conviction that access to truth is based upon valid knowledge.

However, Humboldt also had another concern: *Allgemeine Bildung* or general edification. In order to guarantee *Bildung*, philosophy had to play a fundamental role in his university. Philosophy was conceived as a 'true science' that safeguards the 'unity of research' and truth, and due to this unifying potential (except for merely methodological procedures), researchers as well as students are in the position to transform (and educate) themselves in relation to truth. For this reason Humboldt's project can be regarded as an attempt to conciliate elements of both traditions. More precisely, faced with the emergence of the modern knowledge-oriented/based configuration (and methodological concerns), he asks the question whether 'true knowledge' still has a potential to transform the self (a central theme in the existential-ethical configuration). Philosophical reflexivity (as a kind of unifying meditation) is suggested to guarantee this edifying potential, albeit in combination with scientific methodological reflexivity. After Humboldt, it has gradually become clear that philosophy is no longer able to play this unifying and edifying role, and that philosophy has become a specialised knowledge-based/oriented

discipline among other disciplines in the academic fabric, focusing on the (internal and external) conditions related to knowledge (production).

Maybe today we are confronted with a challenge that is analogous to the one Humboldt faced. In contemporary knowledge societies, the knowledge based/oriented configuration seems to have become *the* model of society. The inhabitants of the 'knowledge society' are individuals whose relation to the self is, to a large extent, determined by knowledge and by research (as knowledge production) itself. They should be generic 'experts' in all domains of life, and be prepared to renew their knowledge base, *ad infinitum*. However, today there is clearly emerging a disappointment with the ongoing call to change and to stay up-to-date, and with the rapid inflation of knowledge. There is a search for inspiration and embodiment, a growing disbelief in the 'enlightening' potential of knowledge and technology, and hesitation towards the promised benefits of an ongoing renewal of one's expertise.

In other words, it seems as if as inhabitants of the knowledge society we are no longer prepared to pay the price for access to the truth that is based on knowledge and the production of knowledge. The benefit of such a society (in its ideal form at least) is that everyone has or should have access to the truth. Yet the other side of the coin is an ongoing extension, accumulation, and transformation of knowledge, without this knowledge having any inspiring meaning and educational potential. Today philosophy, as far as she is obsessed with knowledge on the one hand, and captured by her own stories of post-modernism on the other, is not well positioned to respond. In the context of the knowledge society, where the university and its research play a major role in the production and distribution of knowledge, the existential-ethical configuration seems to be further removed than ever.

However, given the need for inspiration and public gestures, conditions for the elaboration of the existential-ethical configuration are, even though they seem to be further removed than ever, at the same time very near. Maybe today, and especially today, the university, could open up space for the existential-ethical configuration. Contrary to Humboldt, philosophy should not be regarded as the compensating master-discipline, nor its version of ethics, as seems to be the case in many universities today. Ethics in its form of 'knowledge-based deontology' becomes the discipline that imposes, from the outside, possible limits and judges the consequences of knowledge production, and is therefore playing a role within the knowledge-based/oriented configuration of research. Philosophy as a way of life (and hence integrating the existential and ethical), related in a particular way to both research and education, seems to be a valuable option to rethink the university and its research inspirations today. The ontology of the present

could be regarded as one version of such a 'philosophy of education as research', offering us suggestions for the kind of ethos or 'ways of doing' that could inspire it. Other versions could be developed as well. It could be helpful to elaborate for instance some kind of 'empirical philosophy' (Mol 2000; Boomkens 2006) or to carry out what Rabinow discusses in line with Bourdieu as 'fieldwork in philosophy' (Rabinow 2003). That kind of research is an attempt to go beyond the distinction between empirical and conceptual (a distinction that belongs indeed to the knowledge-oriented/based configuration), and in which the very act of investigating one's present puts, at the same time, the (existential-ethical) position of the researcher at stake. This kind of research, taking up the experimental attitude and providing experimental knowledge in the way suggested by Foucault, would then take place in a *laboratory* or *workshop* where 'work on the self' is at stake. Such a laboratory or workshop for empirical philosophy would have a particular public function. Or more precisely, and in line with Foucault and Latour, this workshop or laboratory would itself be a *public space* because the main focus is not on 'matters of fact' (waiting there for the researcher to study them) but 'matters of concern' generated by existential-ethical work resulting in generating public gestures.

To conclude, we think this chapter does not just discuss theoretical topics, but tries to raise issues that have an urgent, actual relevance. It seems there is room today to ask the question of whether we should interchange the priority of the knowledge relation for a relation of care and ethics, that is, the question whether educational research is in need of work upon the self at the ethical-existential level. Again, this question is not a plea for a philosophical or ethical 'compensation' of 'narrow' (empirical, instrumental) educational research. We hope it sounds instead as an invitation to consider the value of existential-ethical transformations *through* research, and to look at the educational researcher as someone who puts herself to the test. But this implies a transformation of current philosophy (of education) and current educational research as knowledge production. In short, the invitation accompanying this chapter is, perhaps, a question of whether we are willing to pay the price for inspired and inspiring educational research – the price of caring for the self and self-transformation, and in view of public gestures.

Note on Contributor

Maarten Simons is Professor at the Centre for Educational Policy and Innovation and the Centre for Philosophy of Education, Catholic University of Leuven, Belgium. His research interests are educational policy, political and social philosophy, and educational theory, with a specific focus on new modes of governance, globalisation/Europeanization, and the public/public role of (higher) education/teachers.

Jan Masschelein is Professor for Philosophy of Education at the Catholic University of Leuven, Belgium. His primary areas of scholarship are educational theory, social and political philosophy, and critical theory. Currently his research concentrates on the 'publicpublic' role of education in the age of networks and on 'mapping' and 'walking' as critical research practices.

References

- Adorno FP (1996) *Le Style du Philosophe*. Foucault et le dire-vrai. Éditions de Kimé, Paris
- Adorno FP (2002) La tâche de l'intellectuel: le modèle socratique. In: Gros F (ed) *Foucault. Le courage de la vérité*. Presses Universitaires de France, Paris, pp 35–59
- Biesta GJJ (2003) Learning from Levinas. *Stud Philos Educ* 21 (1):61–68
- Boomkens R (2006) *De Nieuwe Wanorde*. Van Gennep, Amsterdam
- Carr D, Haldane J (2004) *Spirituality, philosophy and education*. Routledge Falmer Press, London/New York
- Carr W (2004) Philosophy and education. *J Philos Educ* 29(1):55–73
- Derrida J (2001) *L'université sans Condition*. Galilée, Paris
- Foucault M (1979) *Vivre autrement le temps*. In: Defert D, Ewald F, Lagrange J (eds) *Dits et écrits III 1976–1979*. Gallimard, Paris, pp 788–790
- Foucault M (1980) *Entretien avec Michel Foucault*. In: Defert D, Ewald F, Lagrange J (eds) *Dits et écrits IV 1980–1988*. Gallimard, Paris, pp 104–110
- Foucault M (1984a) *Histoire de la Sexualité 2. L'usage des plaisirs*. Gallimard, Paris
- Foucault M (1984b) *Histoire de la Sexualité 3. Le souci de soi*. Gallimard, Paris
- Foucault M (1984c) *Nietzsche, genealogy, history*. In: Rabinow P (ed) *The Foucault reader*. Pantheon, New York, pp 76–100
- Foucault M (1995) *Breekbare Vrijheid: de politieke ethiek van de zorg voor zichzelf* (trans: Van den Boorn R, Thomassen P, Vincenot A). De Balie, Amsterdam
- Foucault M (1997) What is 'enlightenment'? In: Rabinow P (ed) *Michel Foucault, the essential works, vol 1, Ethics: subjectivity and truth*. Penguin, Harmondsworth, pp 303–319
- Foucault M (2000) *Interview with Michel Foucault*. In: Foucault M (ed) *Essential works of Foucault, vol 3 (Power, ed. J. D. Faubion, trans: R. Hurley et al.)*. Penguin, New York/London, pp 239–297
- Foucault M (2001) *L'herméneutique du sujet. Cours au Collège de France (1981–1982)*. Gallimard, Paris
- Foucault M (2004) *Parrèsia. Vrijmoedig spreken en waarheid*. Parrèsia, Amsterdam
- Gros F (2001) *Situation du cours*. In: Foucault M (ed) *L'herméneutique du sujet. Cours au Collège de France (1981–1982)*. Gallimard, Paris, pp 488–526
- Habermas J (1990) *De idee van de universiteit – leerprocessen*. *Comenius* 38(10):166–168
- Hadot P (1995) *Qu'est-ce que la philosophie antique?* Gallimard, Paris
- Hogan P (2003) *Teaching and learning as a way of life*. *J Philos Educ* 37(2):207–223
- Von Humboldt W (1810/1959) *Über die innere und äussere Organisation der Höheren Wissenschaftlichen Anstalten*. In: Anrich E (ed) *Die Idee der deutschen Universität*. Wissenschaftliche Buchgesellschaft, Darmstadt, pp 375–386
- Hunter I (2001) *Rival enlightenments: civil and metaphysical philosophy in early modern Germany*. Cambridge University Press, Cambridge
- Jaspers K, Rosmann K (1961) *Die Idee der Universität: für die gegenwärtige Situation entworfen*. Springer, Berlin
- Latour B (2005) *From Realpolitik to Dingpolitik or How to Make Things Public*. In: Latour B, Wiebel P (eds) *Making things public. Atmospheres of democracy*. ZKM/MIT Press, Karlsruhe/Cambridge, pp 14–41
- Latour B, Sanchez-Criado T (2007) *Making the 'Res Public'*. *Ephemera. Theor Polit Organ* 7(2):364–371
- Levinas E (1991) *Anders dan Zijn*. Baarn, Ambo
- Liotard J-F (1983) *Le Différend*. Les Éditions de minuit, Paris
- Masschelein J (2004) *How to conceive of critical educational theory today?* *J Philos Educ* 38(3):351–367
- Masschelein J, Simons M (2002) *An adequate education for a globalized world? A note on the immunization of being-together*. *J Philos Educ* 36(4):565–584
- McGushin EF (2007) *Foucault's Askēsis. An introduction to the philosophical life*. Northwestern University Press, Evanston
- Mittelstrass J (1994) *Die unzeitgemässe Universität*. Suhrkamp, Frankfurt am Main
- Mol A (2000) *Dit is geen Programma: Over Empirische Filosofie [This is not a Program: On Empirical Philosophy]*. *Krisis: Tijdschrift voor Empirische Filosofie* 1(1):6–26
- Osborne T (1998) *Aspects of enlightenment: social theory and the ethics of truth*. Rowman and Littlefield, Lanham
- Peters MA (2003) *Truth-telling as an educational practice of the self: Foucault, parrhesia and the ethics of subjectivity*. *Oxford Rev Educ* 29(2):207–224
- Peters MA, Besley T (eds) (2007) *Why Foucault? New directions in educational research*. Peter Lang, New York
- Rabinow P (2003) *Anthropos today: reflections on modern equipment*. Princeton University Press, Princeton
- Rajchman J (1991) *Truth and Eros: Foucault, Lacan and the question of ethics*. Routledge, London
- Schelsky H (1979) *Der Mensch in der wissenschaftliche Zivilisation*. In: *Auf der Suche nach Wirklichkeit*. Goldmann, München, pp 449–486
- Simons M (2006) *'Education through research' at European Universities: notes on the orientation of academic research*. *J Philos Educ* 40(1):31–50
- Simons M, Elen J (2007) *The 'research-teaching nexus' and 'education through research': an exploration of ambivalences*. *Stud High Educ* 32(5):617–631
- Smeyers P (1999) *Over de noodzaak van interpretatief onderzoek voor de pedagogische wetenschappen*. In: Levering B, Smeyers P (eds) *Opvoeding en onderwijs leren zien. Een inleiding in interpretatief onderzoek*. Boom, Amsterdam, pp 27–49
- Standish P (2002) *Disciplining the profession: subjects subject to procedures*. *Educ Philos Theor* 34(1):6–23

Joris Vlieghe and Mathias Decuypere

Abstract

This contribution explores what it might mean to perform educational research in a manner that proceeds from an assumption of incompetency. We focus on a recently developed academic research centre, the *Laboratory for Education and Society*, where recognition of incompetency trumps that of expertise, and research is focused on a concern for ‘the present’, rather than, say, the past or the distant. As such, researchers must expect research to involve a transformation of their selves: the kind of research performed is not only about education, but educational in itself. Also, the exploration of new methodologies is itself an object of research. Thus the term ‘Laboratory’ gives credence to the view that finding ways to do the right kind of research is itself part of what is at stake. Research at the Laboratory is multidisciplinary and acts as an “empirical philosophy”. Furthermore it is closely connected to a Masters programme organized by the Laboratory. Given this, concrete educational practices are also researched; and these turn out to be research activities themselves that aim at stimulating an experimental attitude, i.e. preparing students to respond adequately, and in their proper name, to the challenges and immediacies of the present.

Keywords

Care for the self • Experimental attitude • Practices in thought • Empirical philosophy • Alternative academic curriculum

In their contribution on what it might mean to perform educational research today, Simons and Masschelein propose an alternative approach that not only complements a long standing tradition of pursuing this kind of research but might even give rise to a profound change to this tradition. The chapter connects the difference between a more common view of research in education that states that we can only gain access to the truth if our research is securely based upon a scientific method we can blindly rely on *with* the idea that we can only think and speak truthfully at the cost of bringing ourselves as researchers into play. This latter point stresses that we might only speak truthfully if and only if we

take care of the self, implying that we are concerned with engaging in self-discipline and a possible *transformation* of who we are. That is to say, in the first place perhaps we should not be so concerned with asking ourselves as researchers in the field of education whether the truth claims we make are valid in view of clearly defined principles. Instead, as educationalists and researchers, we might be deaf to these demands: not out of a penchant for the new, the radical or the irrational but because of a *concern for the present* - which is always our present and of which the current educational situation remains a matter of concern. Research then no longer appears as a *knowledge-oriented/ based quest* into educational reality in conformity with a rigid scientific method, even though this can be educational in and of itself. Rather, what is at stake is precisely a kind of *self-transformation* or “work-on-the-self” on the part of the researcher herself, i.e. a way of thinking and speaking in

J. Vlieghe (✉) • M. Decuypere
Laboratory for Education and Society,
University of Leuven, Leuven, Belgium
e-mail: joris.vlieghe@ppw.kuleuven.be

which as researchers we can never stay indifferent and, hence, never remain the same.

This kind of research is also *experimental*, though in a way that transcends more common definitions of this word. It concerns not so much testing in a controlled way the adequacy of hypotheses on the basis of empirical data but rather an engagement in practices in which one puts oneself to the test, i.e. in which one engages oneself in a *risky* endeavour, opening in that way the possibility to make something new and unforeseen to appear: to break open the horizon of our self-understanding. This putting of oneself at risk is furthermore no mere solitary task to undertake because in this caring for the present and in breaking open this horizon, *public* issues are articulated as gestures towards a *common* horizon. Experimental research in such a vein conveys a critical, educational and inspirational potential that is inconceivable when sticking to a knowledge- and method-oriented research programme. Furthermore it requires leaving aside the traditional and exclusionary oppositions between theoretical/conceptual and data-based approaches in order to take seriously the idea of an “empirical philosophy”. This certainly sounds scandalous to both the ears of those who are believers of well legitimized methodological principles and those who cherish the idea of a speculative “arm chair philosophy”, but it might be precisely the right course to take when being truly concerned for the educational reality we live in today. That this option is a *vulnerable* and difficult stance seems quite obvious, but it is nevertheless entirely in line with the ethical and *existential* orientation of “education through research”.

We want to elaborate these ideas further but in a more practical way, presenting here a concrete “research programme” that is *experimental* in the sense indicated above. Inspired by the work of Foucault (2005), Rabinow (2008) and Latour (2004), a new research group has recently been inaugurated at the University of Leuven (Belgium): the *Laboratory for Education and Society*.¹ The researchers gathered in this project have made the fundamental decision not to position themselves as clearly belonging to one particular scientific branch, but rather to transcend disciplinary boundaries (philosophy of education vs. social science, foundational/conceptual vs. empirical research) and to take an experimental stance towards present educational reality, as the very name of the research group indicates.

The Laboratory investigates concrete, though fundamental transformations that deeply affect not only ourselves but traditional institutions such as families, schools, universities, and care facilities, as well as more non-formal sites for learning, such as leisure activities, the workplace and communal libraries. More precisely, three issues that emerge at

the intersection of education and society have been selected as exemplary fields for investigation, viz.:

1. the growing impact of virtual and digital technologies (on-line learning, cell phones, games, social network groups, etc.) that transform traditional forms of schooling and teaching, that defy ideas about attention, presence, friendship or intergenerational responsibility, but also open new forms of interaction and communication between (young and/or older) people;
2. the coming into being of a globalized and multi-cultural world which results in a far reaching process of pluralisation and individualization, but which also calls into question notions of civility and community and which, paradoxically, gives rise to a more strongly heard calls for (new) forms of social coherence;
3. the growing tendency to organize or reorganize education on the basis of qualifications and competences that envisage a tight connection between learning activities and accreditation on the one hand, and the efficient functioning of the current knowledge society on the other, narrowing down the traditional idea of edification and *Bildung* to the raising and training of professionally skilled and maximally employable individuals.

These changes have important consequences for the ways in which we give shape to our individual existences as well as for the ways in which we organize our living together, raise new generations, and take care of those in need of special assistance. These changes may also foment deeper levels of change too in who we are today and challenge the ways in which we want to look at ourselves as *educational researchers*. Finding an adequate method and approach to deal with these issues, and exploring the implications for being an educator, are thus from the very start a major concern of the investigations at the Laboratory. This means that the researchers give up an *a priori* established methodology and engage in an *experimental* approach to try to deal with the *present*. To be clear, this is not to say that they give up any methodology *whatsoever*: on the contrary, the researchers believe that the challenges the present imposes engage them fully, implying that they see themselves obliged to develop new and perhaps unexplored ways of doing research that take this present seriously. Such a position also requires that they are involved as persons in finding the right attitude to handle these issues. Thus the laboratory is a *workshop*, not in the popular sense of a professional coaching environment, but in the original sense of a place of labour and craft. It tries to react adequately to the demands, changes and frictions that digitalization, pluralisation and professionalization inescapably bring along.

Moreover, this implies an *ethos* on behalf of the researcher which acknowledges that definite or absolute answers can never be given and that educational realities can never be fully mastered or engineered on the basis of

¹ See: <https://ppw.kuleuven.be/english/ecs/les>

complete scientifically insights. Thus it must also be able to recognise that a community is composed by those affected by indirect and rather unforeseeable consequences of certain actions. Such a “public”, according to Dewey, is precisely constituted by a common interest in caring for those unpredictable consequences (Dewey 1954). Therefore, and because of the acknowledgment of being in a complex and never fully controllable present as researcher oneself, the researcher sees herself as “incompetent” and “disabled” (Callon 2005). However, this is not a prompt for resignation but all the more an invitation to engage actively in what Arendt (1978) has called “exercises in thought”, i.e. attempts to come to terms with the present, as one finds oneself in the gap between past and future. Furthermore, this comes close to the original meaning of philosophy, which in an incipient form (exemplified by Socrates) was not so much doctrinal but a set of practices in *thought* that are meant as a preparation for action (Foucault 2005).

What this means might be elucidated by having a closer look at the curriculum of the Masters programme organised by the Laboratory, preparing students for work in the broad field of education, including adult education, cultural education, and community developments. In line with the overall inspiration of the Laboratory, education and research are not seen as clearly differentiated, and the same goes for formation of the self (as researcher) and the formation of the other (as student). All members of the Laboratory share the conviction that they are not only or even primarily researchers but educators as well (in a sense that departs strongly from the traditional idea that the academic, being a qualified researcher, has therefore the competence to teach scientifically based knowledge). The emphasis of the educational programme in question lies not in the training of professional educationalists in the usual sense of the expression (as competent professionals ready to plunge into the working field). Rather the principal aim of the Masters programme consists in preparing students to be able to develop educational practices that respond adequately and in their proper name to the challenges currently at stake. Of course, the programme is also concerned with the fostering of theoretical knowledge and practical skills but not from the standpoint of handing over clear and definite guidelines that secure a professional position. Rather these are brought into play as food for thought that have to be put to the test in very specific situations.

Moreover, the “hard core” of the training of educationalists consists in a practical workshop in which students are asked to develop concrete answers to concrete issues (e.g. giving delinquent youth a new chance in society, stimulating poor people to have a voice in local policy, promoting migrants to participate in the cultural scene). More precisely, students are required to develop a sensitivity to becoming attentive to the present situation. This requires

giving up existing frameworks and the immediate inclination to pass a scientifically based judgement: through concrete exercises in which familiar practices as walking, looking, listening, reading, etc. are turned into concrete techniques of investigation via which students are invited to become sensible and sensitive to what is not as yet known (or possible to represent on the basis of already acquired skill and insight) and to expose themselves to the world and to others *as they are*. Secondly, they are asked to create their own initiatives that respond to this actual situation from the perspective of an *experimental attitude*: they are not asked to apply theoretical insight they had beforehand to the situation, but rather to become strangers themselves, so to speak, giving up the certainty of an obvious response. At the same time, however, they are also asked to respond to the actual situation with concrete initiatives. Thirdly, and as a matter of turning a particular situation that is commonly considered as a factual matter (delinquency, poverty, etc.) into an issue, students have to present their own projects in a public way, and are hence responsible for taking part in creating a “matter of concern” (e.g. setting up an exhibition, organizing a series of discussion, constructing a website, making a documentary film).

In sum, as educationalists challenged to act in a concrete situation, they become experimenters themselves. The development of practices aimed at in such a workshop is a kind of research itself. What these students do is educational in so far as it is experimental: all are asked to put their own thoughts and preconceptions – and in a sense *their very self* – at stake, and in so doing, they are given the opportunity to develop an attitude to life, others and themselves that turns them into educational researchers. The Masters programme therefore is not aimed *directly* at the formation of competent professionals, but in the first place at the formation of “master”-researchers that put in question the very idea of an *a priori* competent answer/reaction to the particular situation at hand. Positively formulated, the projects they tentatively develop constitute an “empirical philosophy” in the sense that thought, creativity and imagination are engaged in order to find an adequate answer to a situation that renders them disabled and incompetent. This is precisely to say that what they “learn” is not so much *to have a safe/competent position* that is a corollary to a scientifically legitimized knowledge base, but rather, to take an *ethical-existential* attitude: to be present to the world and to others on the basis of a work on the self rather than judging others and the world on the basis of an already existing body of knowledge and skills.

Notes on Contributor

Joris Vlieghe studied philosophy and art history, and received his PhD in educational sciences investigating the role of corporeality in the world of education. He is currently working as a post-doctoral researcher at the Laboratory for

Education and Society at Leuven University. Areas of interest: the philosophy of physical education, alternative ways of thinking the public dimension of education, biopedagogy, as well as the shift from traditional forms of schooling in classrooms to virtual learning environments.

Mathias Decuyper studied educational sciences and is currently pursuing his PhD in the same research area, investigating the impact of processes of digitization on the professional life of academics. As a PhD researcher at the Laboratory for Education and Society (University of Leuven, Belgium), his prime areas of interest include the growing role of digital technologies in higher education, qualitative research methodology, actor-network theory, the university in relation to globalization and the harmonization of higher and university education.

References

- Arendt H (1978) *The life of the mind*. Secker & Warburg, London
- Callon M (2005) Disabled persons of all countries, unite! In: Latour B, Weibel P (eds) *Making things public. Atmospheres of democracy*. MIT Press, Cambridge, pp 308–313
- Dewey J (1927/1954) *The public and its problems*. Holt, New York
- Foucault M (2005) *The Hermeneutics of the subject: lectures at the Collège de France 1981–1982* (trans: Burchell G). Palgrave, Basingstoke
- Latour B (1999/2004) *Politics of nature: how to bring the sciences into democracy* (trans: Porter C). Harvard University Press, Cambridge
- Rabinow P (2008) *Marking time: on the anthropology of the contemporary*. Princeton University Press, Princeton

'Education Is the New Philosophy', to Make a Metadisciplinary Claim for the Learning Sciences

13

Mary Kalantzis and Bill Cope

Abstract

This chapter explores the marginal position and at times methodologically narrow focus of the discipline of education today. It suggests as a counterpoint that a much broader claim can be made for the significance and scope of education. Indeed, as the discipline which explores how humans come to know, and as the discipline deployed to initiate novices into every other discipline, education could make a claim – much as philosophy did until it slipped into practical irrelevance – that it is the discipline of disciplines, or metadiscipline. The chapter explores the implications of this move at a number of levels, from a strategic level in which education plays a pre-eminent role in the formation of 'knowledge society', to its implications for the pragmatics of pedagogy.

Keywords

Pedagogy • Disciplinarity • Epistemology • Knowledge Society • Science

Introduction

This chapter explores the nature and status of education as a discipline.¹ We ask these questions, in this succession: what does disciplinarity mean, and particularly for education – at first glance, a messy amalgam of other disciplines? What would coherently integrated cross-disciplinary inquiry look like? Taking a step beyond cross-disciplinarity, however, could – and perhaps should – we recast education in order to position it as a uniquely all-encompassing metadiscipline? Could it be understood, in some senses, as a 'science of sciences'? What then would this entail?

¹ This chapter reworks and extends ideas begun in our *New Learning: Elements of a Science of Education*, 2008.

M. Kalantzis (✉)
College of Education, University of Illinois, Urbana-Champaign,
Urbana, IL, USA
e-mail: marykalantzis@illinois.edu

B. Cope
Department of Educational Policy Studies, University of Illinois,
Urbana-Champaign, IL, USA

We argue that such moves require: a redefinition of education as a peculiarly expansive 'science', the establishment of a broad agenda for 'knowledge' in the work of this science, a reconceptualisation of the connections of 'knowledge' with 'learning', a definition of pedagogy in terms of its design processes, and an extended understanding of education as intellectual endeavour and social practice.

The contours of our argument are as follows: the chapter ascends in its level of generality through the concepts 'disciplinarity' and 'interdisciplinarity' to make a case for education as 'metadiscipline', then descends into progressively more programmatic detail by discussing what this means for 'science', 'knowledge', 'learning', 'pedagogy' and 'education'. Along the way, we weave between the 'is' and the 'ought', the realities of education as an area of scholarly and pragmatically engaged focus, as well as what, on the basis of these realities, it could possibly be. This is a peculiarly apt time to be thinking along these lines, given the changing nature of knowledge, the expanding modes of its production, and broader expectations of learning's effects.

Disciplinarity

An academic discipline is often understood to imply a distinctive way of making knowledge. But it can mean much more than this. It can imply a field of deep and detailed content knowledge, a community of professional practice, a form of discourse (of fine semantic distinction and precise technicality), an area of work (such as an academic department or a research area), a domain of publication and public communication, a site of learning where apprentices are inducted into a disciplinary mode, a method of reading and analysing the world, an epistemic frame or way of thinking – even a way of acting and type of person.

In the first of these meanings, particularly – ‘a distinctive way of making knowledge’ – that education appears at best to be a hybrid, drawing upon a variety of methodologies including those of psychology, sociology, history, philosophy and management, to name a few. ‘Discipline’ is used here to denote boundaries to an intellectual community, with concomitantly distinctive contexts, practices and methodologies (or constellations thereof) for particular areas of rigorous and concentrated intellectual effort, and the varying frames of reference used to interpret the world. Education does not seem to need to be a distinctive discipline insofar as it is practice-oriented, of primarily instrumental value in the training and accreditation of teachers. It presents itself as a diffused and amorphous practice, providing as it does, support in the induction of neophytes into every other discipline – learning to become a scientist, an economist, an historian and the like. Education is thus regarded as a fellow traveller with all the other disciplines, and for that tends to be confusingly regarded as both ‘natural’ and lacking a distinctive disciplinary identity beyond the pragmatics of a service-learning role.

Interdisciplinarity

Can we, however, strengthen education’s claim to a coherent, cogent, deliberative and distinctive intellectual place by articulating the intersections and co-dependencies that constitute its interdisciplinarity? Learning – as a set of actions and dispositions – is a broad, complex and difficult area of inquiry, which by its very nature needs to be conceived in peculiarly interdisciplinary terms. Perhaps, then, interdisciplinarity can save us from education’s ambiguity of identity. But if that were to be achieved, what would this peculiar interdisciplinarity mean?

To clarify an at times over-used and ill-defined concept first, interdisciplinary work is grounded in the historical practices of more than one discipline, and consciously

crosses disciplinary contexts and boundaries. This seems to be happening more nowadays, when old discipline boundaries prove too constraining as we address the large tasks of our time, and when new, hybrid disciplines emerge. We need to become interdisciplinary for pragmatic reasons, in order to see and do things that can’t be seen or done adequately within the substantive and methodological confines of a single discipline – things as big these days as ‘sustainability’, or ‘globalisation’, or ‘inclusion’, or ‘knowledge’. A broader view of an intellectual or practical challenge may prove to be more powerful than a narrower one, and even the more finely grained within-discipline views may prove all-the-more powerful when contextualised broadly.

The deeper perspectives of disciplinary work need to be balanced with and measured against the broader perspectives of interdisciplinarity. Interdisciplinary approaches also need to be applied for reasons of principle, to disrupt the habitual narrowness of outlook of within-discipline knowledge work, to challenge the ingrained, discipline-bound ways of thinking that produce occlusion as well as insight. If the knowable universe is a unity, disciplinarity is a loss as well as a gain, and interdisciplinarity may in part recover that loss. Interdisciplinary approaches also thrive in the interface of disciplinary and lay understandings. They are needed for the practical application of disciplined understandings to the actually existing world. Robust applied knowledge demands an interdisciplinary holism: the broad epistemological engagement that is required simply to be able to deal with the complex contingencies of a really-integrated universe. Much intellectual and practical work at some point requires disciplinarians to become interdisciplinarians. Education is a clear case in point.

Yet education is also the domain of how humans come to know. This is a question of such breadth and profundity that it can only be addressed in a truly interdisciplinary way. Here are some of the disciplinary strands we may discover we need to tie together: The connections between knowing and learning may need to be grounded in the theoretically fraught philosophical domain of epistemology. While as we deal with humans in their deep diversity, we need a holistic understanding of the sociology and anthropology of difference in inequality. We might also have to acquaint ourselves with territories considered to be part of the natural sciences, such as the latest brain research – not the doubtful empiricist inferences of certain strains of cognitive science or the populist simplicities of brain hemispheres, but difficult recent neurobiology which seeks to find the neurological correlates to consciousness (Koch 2004). We may need to consider once again the stuff of human nature, where physical anthropology meets palaeontology meets the study of primate evolution (Donald 2001). No doubt we need to

study the natural history of this strangely symbolic species (Deacon 1997) and the historical linguistics of the shift from oracy to literacy as modes of representation of the world (Goody 1977; Ong 1982). And we may soon discover that we take a globalist, pan-human view, equally concerned to understand Indigenous, Buddhist, Confucian and Islamic ways of knowing as those of classical Europe and the Western Enlightenment. These are only glimpses of some aspects of what should be education's hugely ambitious interdisciplinary agenda.

We can add to these the range of disciplinary content areas and contexts – teaching mathematics, literacy, science, or ethics – and the range of cross-disciplinary issues that might cross-cut these – learning about the environment, diversity, equity, or ethics – such that you have a disciplinary matrix of great complexity, no matter how particular your point of reference at a specific moment.

The foundational place of learning in all other disciplines, the immanence of learning in every moment and aspect of life, its position at the interface of lay and disciplinary understandings, and the necessarily multiperspectivalism of its humanistic and physiological subject matter (at once psychological, bodily, brain-cognitive, sociological, managerial, and so forth) makes education a discipline which is in its intrinsic character interdisciplinary. At this point, might we abandon our anxieties of disciplinary identity and say that education is always, and necessarily, a site of interdisciplinary rather than disciplinary work? Yes, we could, but no, perhaps we should go further.

Metadisciplinarity

Perhaps education's interdisciplinarity is peculiarly necessary and peculiarly expansive, to the extent that it points to something broader and deeper than other interdisciplinary practices?

Education as we find it in universities, colleges and schools today – this being the point from which we begin in our discussion of disciplinarity – seems to be less rigorous and derivative, its disciplinary base pragmatic and its methods drawn from other, apparently more foundational disciplines: epistemology, the cognitive science of perception and memory, developmental psychology, the history of modern institutions, the sociology of diverse communities, the linguistics and semiotics of meaning, and the substantive knowledge of various subject areas such as literature, science or mathematics, to name several of its sources. This appearance, however, may also be read as a sign of education's metadisciplinarity. Education – or the science of learning – for the same reasons that it appears to be derivative of everything and in support of anything, could

also be framed as the source of all other disciplines. Maybe education could be conceived as a more expansive reference point from which the meaning of other disciplines can be derived, rather than a composite, recomposed from the residual shreds and patches of other disciplines? The interdisciplinary source becomes the source, and so becomes more than merely interdisciplinary.

What, then, would education-as-source do? The metadiscipline of education inquires into learning, or how we come to know and be. Education-as-metadiscipline explores knowing and being, and how people and groups learn and come to be what they are. As such, it is an especially expansive exploration of knowing: knowing how knowing happens and how capacities to know develop, and knowing what being is and how being becomes. (Later in this chapter, as we become more specific, we will discuss what 'knowing' might encompass, more than the conventional stuff of mind and cognition, extending as far as being.)

We want to make this special claim for education for some strategic as well as principled reasons. Too often education is regarded as a poor cousin of other disciplines in the university: the natural sciences, the humanities, and the other professions, for instance. It is regarded as something that enables other disciplines, rather than a discipline in its own right. This is reflected in lower levels of research funding, student entry requirements, and the destination salaries of graduates.

The low status of education, and the reasons why it often sets its intellectual sights so low, can be located in part in its professional and practical orientation and the view that learning is 'natural'. 'Teacher training' it is often called and as such it is often aptly named (rather than teacher education, even), when one surveys the narrowly instrumental intellectual horizons of education programs and courses. The pragmatism of its focus – the mechanics, job practices, and accreditation – prevents education from appearing and becoming a discipline proper, let alone a rigorously interdisciplinary practice or even a metadiscipline. The consequence is that the intellectual profession par excellence, grounded as it should be in this discipline of and for all the disciplines, is reduced to narrow proceduralism. Education's graduates, instead of becoming innovators and forward thinkers, become people who are wedded to the familiar, heritage institutions of schooling and their processes. They become deeply conservative, in their orientation to social institutions, even if not by and large in their political stance understood in the conventional sense.

This might have been a workable outcome until recently. It might have been enough to produce good systems people, administratively speaking. Not only did education's graduates 'get' the tricks and tropes of institutional schooling to have made it over the accreditation bar. They must

also have liked these oft-times strange games enough to dedicate the rest of their lives to those same institutions. What, then, could we expect teachers to be, other than defenders of a certain kind of teacherliness into which they have grown from a very early age? Yet the habits which make for institutional inertia are now reaching a crisis point: we face deep structural challenges to heritage educational practices presented by the forces of globalisation, new technologies, differentiated identities, distributed knowledge systems, and a shift in the balance of agency away from hierarchical and towards participatory cultures. Maybe it's time to broaden our horizons of intellectual and practical interest. Maybe, even, we will have to.

How could education become a metadiscipline: a discipline of disciplines? Could education become intellectually adventurous, a disciplinary leader rather than an enabler of other disciplines, which does little better than draw haphazardly on bits and pieces of other disciplines for its priorities, methodologies and content?

Here is what is unusual about education, reasons why it could be a pivot point for all other disciplinary endeavour: The intellectual and practical agenda of education is no less than to explore the bases and pragmatics of human knowledge, becoming and identity. Education asks this *ur*-disciplinary question: How is it that we come to know and be, as individuals and collectively?

If this is education's central question, surely then we can argue that it is the source of all other disciplines? It is the means by which of all other disciplines come into being. The metadiscipline of education is greater than the conventional stuff of the institutions of schooling and their processes. It deserves more than practices which draw eclectically and opportunistically for its work on the tools other disciplinary trades. Much more ambitiously, it is about the foundational and expansive question of knowing and becoming. It used to be philosophy which claimed a cross-domain position of this order, but philosophy may have lost this place for having become too disengaged from other disciplinary practices, too arcane and word-bound, too disconnected from lived or practical experience.

More than the equal of other disciplines, education is the soil in which all the other disciplines grow. You can't do any of the other disciplines in a university or college except through the medium of education. No other discipline exists except through its learning: an individual learning the accumulated knowledge that has become that discipline, and the social learning represented by the whole discipline itself and its community of practitioners. Education is about knowing and becoming, and knowing is the foundational question for all intellectual and much practical work, and hence, becoming.

Education is the new philosophy.

Science

What, then, are the processes of the metadiscipline of education? Is it a science? And if it is, in what sense? What does it mean to be a metadisciplinary science, as distinct from 'normal' science?

One response to education's disciplinary identity crisis is to retreat into method for self-definition, and narrowly circumscribed method at that. In the case of Federal educational research funding during the Bush II regime in the United States, that method of choice was the 'gold standard' of randomised controlled experimentation, legislated in the No Child Left Behind Act. This idea is represented in its clearest and most influential form in the report of the US National Research Council, *Scientific Research in Education* (Shavelson and Towne 2002). The drift of the report is to assert that only a certain kind of empirical research and controlled experimentation – x initiative leads to y measurable results – is worthy of the name 'science'. Like the medical scientist, we might give some learners a dosage of a certain kind of educational medicine and others a placebo to see whether a particular intervention produces better test results. This, the report calls 'evidence-based research', rather too ambitiously insofar as there are surely other roads to empirical knowledge, and not just one which is templated upon clinical medical research.

The Department of Education is explicit about its agenda here: "Unlike medicine, agriculture and industrial production, the field of education operates largely on the basis of ideology and consensus. As such, it is subject to fads and is incapable of the cumulative progress that follows from the application of the scientific method and from the systematic collection and use of objective information ... We will change education to make it into an evidence-based field" (Quoted in Erikson and Gutierrez 2002: 22). So, in this conception, the intellectual task of education is to measure various classroom inputs in relation to learner test outputs in an empiricist and instrumentalist way without critically examining the broader frame of reference of the classroom in a changing society and the relevance of the outputs. For its methodical proceduralism alone, this variant of the discipline of education calls itself science. But what if it turns out to be a science that is attempting minor re-engineering of a pedagogical system which might be in need of a more thoroughgoing overhaul?

One possible rejoinder to the elevation of randomised controlled experimentation as the beginning and end of educational science, is that education can never be like a science: the model of controlled experimentation offered by laboratory natural science is unachievable in education and if anything unethical (Popkewitz 2004: 67–68). We're dealing with human beings with interests, desires, identities and

agency, not just cognitive entities and clinically isolatable pedagogical moves.

Another rejoinder is that the natural and technological sciences are themselves more 'ideological' – more subject to contestation around axes of human interest – than the narrow understanding of science proffered by the proponents of 'evidence-based' research seem to be able to comprehend. Whether it be bioethics, the politics of climate research, the debates around Darwinism and 'intelligent design', or the semantics of computer systems, questions of politics and ideology are bound closely with the ostensible evidence. There can no longer be any faux empiricism, not even in the natural and technological sciences. Nor can there be narrowly unambitious apolitical horizons. Maybe there's something fundamentally wanting in the institutional inheritance that is today's schools?

Meanwhile medical scientists are trying to tackle problems that are seemingly impossible and, much of the time, ethically contentious. They're doing something bigger than randomised controlled experimentation. Their ambitions are high. Their risks great. They are trying to come up with things that are fundamentally new, radically innovative, shockingly transformative. Any such ambitions are way beyond the bounds of a narrowly 'evidence-based' view of education science, methodologically and in practice.

The understanding of science that underlies this definition of education's disciplinarity reflects a semantic narrowing of the word that is peculiar to English. In English, 'science' seems to apply more comfortably to the natural world, and only by analogy to some of the more systematic and empirically-based of the human sciences. It connotes a sometimes narrow kind of systematicity: the canons of empirical method, an often less-than reflective acceptance of received theoretical categories and paradigms, formal reasoning disengaged from human and natural consequences, technical control without adequate ethical reflection, the elision of means and ends, narrow instrumentalism and techno-rationalism, a pragmatism without a broader view of consequences, and conservative risk aversion. These are some of the occupational hazards of activities that name themselves 'sciences' – social, natural or applied. However, it's not enough simply to have a rigorous empirical methodology without a critical eye to alternative interests and paradigmatic frames of reference, and without a view to human-transformational potentials.

By counterposition, humanistic methodologies often take charge of the social, distancing themselves from the perceived narrownesses of scientific method. But this move may at times leave science stranded, separated from its social origins and ends. The natural and technological sciences are subject to greater contestation around axes of human interest than a narrow understanding of science would admit. A reconstructive view of the social, natural

and applied sciences needs to be more holistic, attempting to avoid the occlusions of narrow methodological approaches. It would also be more ambitious, intellectually and practically.

We might, perhaps, consider a broader view of science as disciplinary practice, and in particular the kind of science we might deploy in the intellectual and practical work of education, an area of work we are now claiming has an unusually metadisciplinary character and responsibility. What can we mean by this 'science'?

The English word 'science' derives from the Latin 'sciens', or 'knowing'. The meaning of 'science' has been narrowed in English to mean empirical method applied to the natural or human world without the minimisation potentially prejudicial subjective interest (Chalmers 1976). In this narrow English definition, philosophy and the study of literature are not sciences; they are 'humanities'. And where is education in this narrow understanding of the term 'science'? The answer is ambiguous, half way between the sciences and the humanities, perhaps. Or narrowly in an adaptation of empirical methods from clinical medicine if one wants to find a methodological 'gold standard'.

Return to the expansiveness of 'science' in its etymology, and the study of human learning must have claim to the word at least equal to the other social sciences and the natural sciences. The root, however, is perhaps too expansive to describe the contemporary practices of science. Not all knowing deserves to be called 'science'. To be all-encompassing would rob the word of the capacity to make some important distinctions between scientific work and the knowing that happens in ordinary, everyday experience. Broader than empirical work alone, the meaning of science we want to propose implies an intensity of focus and a concentration of intellectual energies greater than that commonsense, vernacular or lay knowing. It relies on the ritualistic rigour and accumulated wisdoms of disciplinary practices.

Wherever science is to be found, it involves a kind of systematicity that does not exist in casual experience. Husserl draws the distinction between 'lifeworld' experience and what is in 'transcendental' about science (Husserl 1970; Cope and Kalantzis 2000). The 'lifeworld' is everyday lived experience. It is a place where one's commonsense understandings and actions seem to work instinctively: not too much conscious or reflective thought is required. The 'transcendental' of science is a place above and beyond the commonsense assumptions of the lifeworld. In counterdistinction to the relative unconscious, unreflexive knowledge in and of the lifeworld, science sets out to comprehend and create designs which are beyond and beneath the everyday, amorphous pragmatics of the lifeworld. Science is focused, systematic, premeditated, reflective, purposeful, disciplined, and open to scrutiny by a community of experts. Science is

more intensive work and harder work than the knowing in and of the lifeworld.

Here are two big openings for the practice of educational science if we conceive education to be a metadiscipline. The first is to think broadly and deeply about the conditions of our knowing and learning, to strengthen the theories, the research methodologies, the epistemologies and the practices needed for a science that is the grounding for all disciplines which purport to address the social world and the relation of the social to the natural world. Its foundational question is, how can we know in ways which in any way transcend the ordinary knowledge of the lifeworld? Education exists at the interface of the lifeworld and science. Its focus, no less, is how one comes to know in ways that are more than unconsciously and unreflective embedded in the lifeworld. This is big science and deeply significant science, in the service of all disciplines.

The second opening is pragmatic and inventive. Intellectual work is more than an act of observation. It is also an act of imagination and design. At its best, it is ambitious, risky and world-transformative. If the medical sciences can have big human ambitions, then the social sciences can have ambitions as large as to settle the relation of humans to the natural environment, the material conditions of human equality and the character of the future person. There's no knowing what we can do to address any of these issues without a science of education, broadly conceived. Indeed, perhaps our conception should be as broad as this.

Education is a science for all sciences.

Knowledge

The metadiscipline of education – this science of sciences – focuses on the theories and practices of how humans come to know and be. What do we mean by ‘know’, and how is ‘know’ connected to ‘be’?

We can start narrowly, linking knowledge to cognition, conventionally understood. Everyday semantics tells us that knowledge is stuff in one's head. It is information or things one knows. It also involves ‘understanding’, or the capacity to work things out for oneself on the basis of logic and the patterns which underlie information.

Knowledge however is a lot more than just what's in one's head, or how one's head perceives and what it figures to be in the outside world. Head is in dynamic interrelation to body, and body is a thing in and of the physical world. Mental experience is in one's body, and body is a part of the world of physical existence. One's mind's thinking is connected to the body's feeling, and these feelings are extensions of the body into the sensuous world – the sights, sounds, smells and tastes that comprise or everyday experience. Our whole

bodies, not our minds alone, are gripped by emotion – happiness, sadness, love, hatred, fear, anger, surprise or curiosity – and these emotions are part of our deeply ingrained knowing processes (Damasio 1994). Our bodies are also engaged in the business of representation or meaning. The mind cannot mean anything, either to others or to itself, without the body and its connections with the sensuous world. In this sense, knowing is not just what you think. It is what you do and how you are in the sensuous world. Knowing is a process of becoming. Human being is its outcome.

Knowing is a set of capabilities, not just a set of mental capacities. A set of mental capacities exists in order to do things in the world: to hammer a nail or build a bridge, to cook a meal or fly to the moon, to solve a small problem or imagine a better future. Mental capacity is one part of the equation, but mental capacity is empty and meaningless without the capability to do something with it. In this sense, knowing is not just what you can think; it is what you can do and who you can be in the context of an inseparably interlinked ‘outside’ world. Knowing is constitutive of being.

Another kind of ‘outside’ is the intrinsically social character of knowledge: the things you know because you have been told, things that you rely on other people to know and things that you can find out when you need to. When we make knowledge, we rely heavily on these outside knowledge resources. We connect with these in the form of knowledge handed on to us by other humans from their accumulated experiences, stored in social practices and representations of the world: their ways of categorising things, their ways of making logical connections and the conclusions they have come to about the nature of the world. These are given to us in the form of already-constructed and always-ready-to-be-shared meanings: *linguistic* (a language which helps us make sense of the world), *visual* (the imagery of our surroundings and our culture), *audio* (from alerts to music which evokes emotion), *gestural* (bodily meanings), *tactile* (sensations of touch, smell and taste) and *spatial* (bodily positions such as teacher in relation to learner or shopkeeper and customer, and architectonically-shaped meanings) (Cope and Kalantzis 2009a, b). These meanings are the raw materials of human society and culture. They are the stuff of beliefs, values, rules, ideologies and identities. These meanings constitute our being.

This then, is the scope of the metadiscipline of education. If we are to address how we come to know, our subject matter is no less than thinking, feeling, body, action, the natural and constructed world, representation and sociability: the sum total of being. There is little or nothing else we need to think about or act upon. This is why the science of education is so much broader than ‘normal’ science.

So, if knowing is a kind of action that can be this ordinary, how do we distinguish everyday knowing from deeper knowing? This is a key question for the discipline of education. It is akin to the lifeworld/science distinction which we need in order to define science more precisely than all of knowing. What is the capability of deeper knowing that is 'knowledge-ability'? What is the product of that capability, to be 'knowledgeable'? What is expertise, and how does one become expert?

Knowledge-ability is the product of deliberate knowledge design work, special efforts put into knowing something. It entails a peculiar intensity of focus and specific knowledge-making techniques, working at the interface of everyday life and specially designed efforts to elicit deeper knowledge. As a consequence, others are able to rely upon a person who is knowledgeable, and that person is better able to trust their own knowledge. In a society of hugely expansive knowledge, we can trust our knowledge in some areas, but need to rely on the expert knowledge of our fellow humans in other areas, hence the engineers, or doctors, or teachers, or mothers, or experienced hikers, for instance. Not only do we rely on these others because they have become knowledgeable. We also respect their knowledge-ability, and the domain-specific techniques they have used to become knowledgeable and continue to use as they encounter new problems and challenges. We rely on the work they have put into knowing, their education. Knowledge is grounded in the specially focused things one does which distinguish everyday, common-sense knowing from an organised, ordered, socially and historically constructed knowing. Such knowing is regarded as trustworthy because of its practical effectiveness, its authoritative sources, and its openness to critique and refutation.

The unknowing understandings of the lifeworld may, by contrast, consist of: casual impressions that are fleeting, observations that are superficial, perceptions that turn out to be illusions, conclusions that prove to be erroneous, emotions that cloud sound judgment, intuitions that are ill-informed, wishful thinking when you really want something were the case but later come to the realisation that it is not, opinions based on personal prejudice, ideologies which represent narrow self-interest, statements that can be shown to be illogical, perspectives that are based on limited experience and which are inappropriately applied beyond their parochial source, or lore and rule which has been handed down from sources of institutional power and authority and accepted unquestioningly, true to relations of power but not more broadly true.

By contrast, deeper and broader knowledge is the result of things people have done which makes their understanding more reliable than casual lifeworld experience. To become critically knowledgeable about phenomena of the embodied lifeworld, and in ways of knowing beyond taken-for-granted experience, requires systematic observation, the application

of strategies for checking, questioning and verification, immersion in the culture of the way of knowing under examination and the use of multiple sources of information.

More rigorous knowledge making strategies include: corroborating perceptions with others who have seen the same thing and which can be further tested and verified by others, applying insight and awareness based on broad experience to emotions and feelings, justifying opinions and beliefs to oneself and others (including others whose judgment is to be respected based on their expertise), taking into account ideologies which represent interests broader than one's own and with a longer view than immediate gratification, statements whose logical consistency can be demonstrated, developing perspectives based on in-depth and broad experience and which are broadly applicable, grounding principles in critical reflection by oneself and others, and forming intelligence in the light of wary scepticism and an honest recognition of one's own motives. The knowledge that is founded on these kinds of knowledge-making practices, purposeful designs for learning-engagement in and with the world, help form a person who may be regarded as knowledgeable, a person who has put a particularly focused effort into some aspects of their knowing.

Knowledge worthy of its name consists of a number of different kinds of action which produce more trustworthy, more insightful and more useful results. We have to concentrate on our ways of knowing to achieve this greater depth or expertise. We have to work purposefully, systematically and more imaginatively at it. What, then, are some of the things we can do to know? What do we do which means that our knowledge transcends the everyday understandings of the lifeworld? What do we do when we do science?

Science consists of a variety of forms of learning-action or knowledge processes. It is not simply a process of thinking or a matter of understanding in the cognitive sense. Rather it is a series of performatives: acts of intervention as well as acts of representation, deeds as well as thoughts, types of practice as well as forms of contemplation, designs of knowledge action and learning-engagement in concept as well as action. The deeper and broader knowledge that is the object of study of the science of education consists of the kinds of things we do (knowledge-abilities) to create out-of-the-ordinary knowledge.

How, then does one come to know? Fazal Rizvi's talk of 'epistemic virtues' alludes to this terrain, discerning these as markers of practices in creating reliable knowledge (Rizvi 2007). But what is the range of knowledge-making actions that one could take to create out-of-the-ordinary knowledge? How does one develop deeper capacities for knowing that we have called science in the broader sense?

We want to suggest four-by-two main types of engagement with knowing or knowledge processes which may constitute a knowledge repertoire (Kalantzis and Cope 2005; Kalantzis and Cope 2008). These are the kinds of

things you can do to know. Each of the four is no more than a rough grouping. In the real life of knowing, several of these modes of knowledge engagement may be found to be indistinguishably connected. In this sense, they are orientations to knowledge rather than neat categories of knowledge-making activity. These are some of the out-of-the-ordinary learning-actions or knowledge processes that might be taken as markers of more reliable knowledge and justify use of the word 'science'.

Experiencing

- (i) Science has a basis in *lived* experience. This experience may be grounded in direct personal intuition of the already-known, on interests integral to the lifeworld, on the richness of life fully lived. But it involves a concentrated focus on the ground of experience and methods for its reading which are beyond casual immersion. This kind of knowledge process might involve protocols for listening to voice, feeling the sensual, recognising the embodied, framing the performative, accounting for the complex layers of the lifeworld, explaining the politics of identity or understanding the intuitive. These are the virtues of poststructuralist social science. Their occupational hazards are excessive subjectivism, an agnostic relativism and a distancing, identity-driven politics (Blackburn 2005).
- (ii) Science also has an *empirical* basis, or the experience of moving into new and potentially strange terrains, deploying the processes of methodical observation, carefully regulated experimentation and systematic reading of experience. This kind of knowledge process uses systematised routines of observation, testing, recording, measurement, quantification and description. Taken to one-sided excess, it creates narrow empiricism such as characteristic of the 'No Child Left Behind' vision for educational science.

Conceptualising

- (i) Science uses *categorical* frames of reference based on higher levels of semantic distinction, consistency and agreement within a community of expert practice, than is normal in everyday discourse. Using this knowledge process, we may make knowledge by grouping like and unlike on the basis of underlying attributes, and we may abstract, classify and build taxonomies (Vygotsky 1962). The danger in such categorical work is rigidity and overly simplified either/or dualisms.
- (ii) Science puts concepts to work in *theories* which model the world and build explanatory paradigms. The danger

of excessive emphasis on theory is unreflective acceptance of received theories and poorly grounded epistemological idealism.

Analysing

- (i) Science develops frames of reasoning and *explanation*: logic, inference, prediction, hypothesis, induction, deduction. Amongst the occupational hazards of this kind of knowledge work is to develop systems of formal reasoning disengaged from human and natural consequences, that create systems of technical control without adequate ethical reflection; that elide means and ends, and that promote a narrow functionalism, instrumentalism or techno-rationalism.
- (ii) Strong science also analyses the world through the always cautious eye of *critique*, interrogating interests, motives and ethics that may motivate knowledge claims. It promotes, in other words, an ever-vigilant process of metacognitive reflection. However, the dangers of these kinds of knowledge work include disengaged criticism and supercilious inaction without design responsibility, political confrontation without constructive engagement, academic fractiousness without apparent need for negotiated compromise.

Applying

- (i) Science is also application-oriented. It is *pragmatic*, designing and implementing practical solutions within larger frames of reference and achieving technical and instrumental outcomes. What purpose has knowing, after all, other than to have an effect on the world, directly or indirectly? This kind of knowledge process involves practical forms of understanding and knowledge application in a predictable way in an appropriate setting. Its dangers may be narrow instrumentalism and uncritical, technicist pragmatism.
- (ii) In its most *transformative* moments science-in-application is inventive and innovative: redesigning paradigms, and transforming social being and the conditions of the natural world. This kind of knowledge process may be manifest as creativity, innovation, knowledge transfer into a distant setting, risk taking, self-enablement, and the attempt to translate emancipatory and utopian agendas into practical realities. Its occupational hazards are voluntaristic overconfidence that leads to a naive lack of pragmatism and a misreading of practical circumstances that produces failure.

Less important than the specifics of this grouping, however, is the idea that purposefully deploying a broader range

of knowledge processes can produce more cogent knowledge than a narrower, unreflective and more ad hoc range. So, for instance, a careful empiricism is all the more powerful if balanced with a cautious eye to interests and agendas. Applied knowledge work will be more powerful if it is founded on clarity and coherence of categorical precision and theoretical framing. Science, in other words, is likely to be stronger when we use a balance of alternative knowledge moves or acts of knowing.

When its processes of knowing are more partial, reliable science is aware of its partiality and able to justify it. Disciplines may prioritise one or more knowledge process or kind of scientific move over others, and this may be the source of their strength as often as they are also potential points of weakness – for instance, reflections on lived experience and critique in literary analysis, or categorical frames of reference and logical reasoning in elementary particle physics – though no substantive domain of knowledge could every be completely resistant to one or other of the knowledge processes.

Science can be distinguished from lifeworld when any or all of these knowledge processes are put to work. Education as metadiscipline, however, must use them all, for all are needed to understand the sources, dynamics and transformative energies of knowing and learning. Education is, uniquely, not just a user of the knowledge processes, but a metadiscipline whose concern is all of these knowledge processes: what they are, why we use them and their knowledge-learning effects.

This is why education is the science of sciences.

Learning

Learning is the way a person (ontogenetically speaking) or a group (phylogenetically speaking) comes to know and be. Learning happens anywhere and everywhere, anytime and all the time in our everyday experience of the lifeworld. It happens naturally in the sense that it is integral to our character as a species. Much of the time, we learn effortlessly and thus without conscious attention. Indeed, learning is embedded in the world with such pervasive subtlety that, much of the time, we are barely aware it is happening. After the event, we may be surprised by what we come to realise we have learnt. This becomes the stuff of judgment and intuition that lends strength to our convictions.

The casual learning of the lifeworld is endogenous – intrinsic – arising from within and to be found throughout. This kind of learning is sometimes called 'informal'. It does not require pedagogy, or curriculum, or social settings that might be called 'educational'. It is amorphous. It happens in a haphazard way. It is an unorganised process, incidental and

accidental. Sometimes this learning happens in roundabout ways, where, in retrospect, you realise you could have learnt something quicker and more directly if you had been directly instructed. This learning is often so endogenous, so embedded in the lifeworld, that you barely realise you have learnt. It is organic, contextual, situational. The things you come to know this way mostly take the form of tacit, passive or background knowledge.

Education, by comparison, is more conscious and structured. It is relatively formal insofar as it is deliberate, systematic and explicit. It sets out to be a more efficient way of becoming knowledge-able and acquiring specific knowledge. To this end, it is structured and goal-oriented. It involves deliberate and deliberative design and is thus more analytical than everyday learning: abstracting, generalising, and creating knowledge which will not only work for the setting in which it is found, but perhaps also be transferable from one context (the curriculum) to one or more other contexts (in the world). Education also happens in a peculiarly focused kind of representational space or learning community, whose role, relationships and rules are directed in the first instance to learning, and only secondarily to the ends of this learning in the wider world.

Education, most importantly, is a particular form of learning which consciously creates an outside (the lifeworld) separate from the inside (the extra effort that is put into premeditated knowing). In these senses, it is grounded in the broad foundations of science-work. In fact, education makes knowledge moves that parallel those of science.

Of course, the lifeworld of informal learning is intimately connected by lines of reference to the educational processes of formal learning. But there are things about education which make it a different kind of learning process to everyday or casual learning in the lifeworld. One of the more obvious differences is tangible: we're in this learning space (inside) speaking about the world or another space (outside). Another is the mode of speaking: an externalised reference to speak in a necessarily abstracting way about general phenomena for which there may be numerous instances. (In the lifeworld, we're mostly interested in the instances that stand before us.) It is, moreover, necessarily explicit. You can't simply say 'look at that' because the mountain stands before you as an awesome presence. Instead you have to name or picture or simulate what you are talking about explicitly, precisely because your referent is not there with you. This requires a particular form of imagination (McGinn 2004). The key to education is how you bring the outside inside, and their modes of interconnection. Through these connections there arise specific educational roles, relationships, (teacher/learner) and rules of engagement.

Today, the nature of the inside/outside distinction that defines education is changing. In the past, education was institutionally, spatially and temporally defined: a

characteristic teacher-learner relationship, architectonic arrangement and timetable. By contrast, education today is becoming ubiquitous (Cope and Kalantzis 2009a, b). A learner may be at home, engaged in an e-learning program. Or they may be involved in a mentoring program at work. Or they may be learning how to use a piece of software using a help-menu or tutorial that is built into the software. The sites may be more dispersed, the times more flexible and the teacher-learner relationships transformed, but there's something about the knowledge authority-novice relationship, about scaffolded learner activities, and about the mode of inside-to-outside reference, that still makes even these diffused modes of learning relatively formal, consciously designed and thus specifically educational.

Informal learning occurs without conscious educational design. Formal learning or education is a process of learning by design. Learning communities and modes of representation which are specifically designed for that purpose may range from a traditional classroom, to a mentoring relationship built into a workplace, to an online program, to a school or a whole education system. They are unlike communities and representational modes in which learning incidentally happens to occur, and this is because they establish specifically educational relationships between people and between people and knowledge.

Pedagogy

Pedagogy consists of the microdesigns of learning, the action sets that are constitutive of knowing and so, being. A journey of sorts, pedagogy's plans, circumstances, effects and traces can be told in narrative form. Pedagogy is constituted through the actions one takes to build out-of-the-ordinary knowledge, as a person or in a group.

We mean 'out of the ordinary' in two of the possible senses of this phrase. In one meaning, we literally mean 'out of', for knowledge is inevitably grounded in the ordinary. Education's reference point is to an ordinary world on its outside. It necessarily connects with this outside world, which it both reflects and transforms. Education is built from the ground of the lifeworld. However, educational spaces have a peculiar manner of being in the world, both formal institutions with physical locations and other sites or moments of time in which we do things that we might call 'educational'. They are about and for the world without quite being of the world. Their primary reason for being is outside of themselves. Pedagogy, for instance, refers to the world: now mountains, then great deeds, then things to be enumerated. Education also shapes human capacities which can be used in the outside worlds of work, citizenship and community life.

We call this 'exophoric' reference. An exophoric reference points out at something. 'Look at that', we might say in words, when we're both experiencing the sight of the mountain, an unexceptional lifeworld experience. The words mean very little without the shared experience, without our common understanding of what the sentence is pointing out to. In education, we are forever referring to things in text or image which exist beyond the room or the page or the screen. This is one of the peculiar things about education. It never exists for itself. It always exists for purposes beyond itself. It points out at the world. And across the range of educational experiences, there is nothing in the world to which some bit of education does not point, or could not conceivably point. In these respects, there is nothing else quite like education. Of all the sciences and professions, education is uniquely 'other-worldly' and uniquely all-encompassing.

However, when we say that pedagogy is 'out of the ordinary' we also mean to say that it is extra-ordinary, to play to another meaning of this ambiguous phrase. It is deliberate and designed. One aspect of this is an unusual degree of explicitness. Exophoric reference needs to be more explicit simply to be intelligible. Education does not have the benefit of shared experience that can be taken-for-granted for the simple reason that world to which it refers is not immediately present. And education is extra-ordinary for another reason: just like science, pedagogy deploys characteristic moves in order to create knowledge that is deeper and broader than ordinary knowledge in the lifeworld, ordinarily and informally learned. So, the metadisciplinary science of education is about the deliberate and focused ways of coming to know which distinguish science, and the ways these can be translated into effective designs for learning.

Pedagogy is the design of learning activity sequences, localised in time and space, and with a narrative structure (orientation, journey, destination). It is a scaffold for learner performances of knowing.

Pedagogy is learning-by-design.

Following is a translation of the four-by-two knowledge processes we suggested for science, into four-by-two knowledge processes for pedagogy. This is how the characteristic moves of science might be translated into a pragmatics of pedagogy. The choices made constitute in the domain of pedagogy, constitute designs for learning. Learning by design needs to be deliberative, purposeful and reflective in order to ensure that goals align with the performance outcomes and aspirations of learners.²

² Our Learning by Design project is an attempt to frame these concepts in pedagogical practice. See L-by-D.com.



Experiencing

Experiencing is a knowledge process in which learners develop knowledge through immersion in the real, everyday stuff of the world: personal experience, concrete engagement and exposure to evidence, facts and data. Experiencing occurs as an unexceptional matter of course in the lifeworld – and the learning that is its consequence tends to be unconscious, haphazard, tacit, incidental and deeply endogenous to the lifeworld. By comparison, the experiencing that occurs in pedagogy in its nature tends to be far more conscious, systematic, explicit, structured and exophoric. It assumes a stance in which the experiencing refers to a place outside of the educational setting: by means of textual, visual or audio representation, by simulation or by excursion, for instance. We propose two, quite distinct ways of experiencing:

- (i) *Experiencing the Known* is a knowledge process which draws on learner lifeworld experience: building upon the learning resource of the everyday and the familiar, prior knowledge, community background, personal interests and perspectives and individual motivation. Human cognition is situated. It is contextual. Meanings are grounded in real world of patterns of experience, action and subjective interest. Learners bring their own, invariably diverse knowledge, experiences and interests into the learning situation. These are the subjective and deeply felt truths of lived and voiced experience. Cazden and Luke call these pedagogical ‘weavings’, such as between school learning and the practical out-of-school experiences of learners (Cazden 2006).

- (ii) *Experiencing the New* is a knowledge process in which the learner is immersed in an unfamiliar domain of experience, either real (places, communities, situations) or virtual (texts, images, data and other represented meanings). The ‘new’ is defined from the learner’s perspective: what is unfamiliar to them, given their lifeworld origins. To make sense of the new in a way which is adequate to productive learning, however, the new at least has to have some elements of familiarity: it has to make at least half sense, and it must make overall intuitive sense. For learning to occur, it also needs to be scaffolded: there must be means for the parts that are unfamiliar to be made intelligible (with the assistance of peers, teachers, textual cross-references or help menus, for instance). The result is a journey away from the lifeworld along a horizontal axis of expanding knowledge, taking a cross-cultural journey of one sort or another. Experiencing the New entails immersion in new information or situations, careful observation, and reading and recording of new facts and data. Learners encounter new information or experiences, but only within zone of intelligibility and safety, of what Vygotsky calls a ‘zone of proximal development’, sufficiently close to the learners’ own lifeworlds to be half familiar but sufficiently new to require new learning (Vygotsky 1978).

Conceptualising

Conceptualising involves the development of abstract, generalising concepts and theoretical synthesis of these concepts. In this knowledge process, the learner moves away from lifeworld experience along a vertical axis of deepening knowledge: examining underlying structures, causes and relationships, many of which may be counter-intuitive and challenge commonsense assumptions. Conceptualising occurs in two ways:

- (i) *Conceptualising by Naming* is a knowledge process by means of which the learner learns to use abstract, generalising terms. A concept not only names the particular; it also abstracts something general from that particular so that other particulars can be given the same name despite immediately visible and situational dissimilarities. In child development, Vygotsky describes the development of concepts in psycholinguistic terms (Vygotsky 1934/1986). Sophisticated adult thinking equally involves naming concepts (Luria 1976). *Conceptualising by Naming* entails drawing distinctions, identifying of similarity and difference, and categorising with labels. By these means, learners give abstract names to things and develop concepts. Expert communities of practice typically develop these

kinds of vocabularies to describe and explain deep, specialised, disciplinary knowledges based on the finely tuned conceptual distinctions. Conceptualising is not mere a matter of teacherly or textbook telling based on legacy academic disciplines, but a knowledge process in which learners become active concept-creators, making the tacit explicit and generalising from the particular.

- (ii) *Conceptualising with Theory* is a knowledge process by means of which concept names are linked into a language of generalisation. Theorising involves explicit, overt, systematic, analytic and conscious understanding, and uncovers implicit or underlying realities which may not be immediately obvious from the perspective of lifeworld experience. Theorising is typically the basis of paradigmatic schemas and mental models which form the underlying, synthesising discourse of academic discipline areas. *Conceptualising with Theory* means making generalisations and putting the key terms together into theories. Learners build mental models, abstract frameworks and transferable disciplinary schemas. In the same pedagogical territory, a didactic-mimetic pedagogy would lay out disciplinary schemas for the learners to acquire (the rules of literacy, the laws of physics and the like). In contrast, active *Conceptualising with Theory* requires that learners be concept and theory-makers. It also requires weaving between the experiential and the conceptual. This kind of weaving is primarily cognitive, between Vygotsky's world of everyday or spontaneous knowledge and the world of science or systematic concepts, or between the Piaget's concrete and abstract thinking.

Analysing

Analysing is a knowledge process involving the examination of constituent and functional elements of something, and an interpretation of the underlying rationale for a particular piece of knowledge, action, object or represented meaning. This may include identifying its purposes, interpreting the perspectives and intentions of those whose interests it serves, and situating these in context. Analysing takes two forms:

- (i) *Analysing Functionally* is a process of involving the examination of the function of a piece of knowledge, action, object or represented meaning. What does it do? How does it do it? What is its structure, function, connections and context? What are its causes and what are its effects? *Analysing Functionally* includes processes of reasoning, drawing inferential and deductive conclusions, establishing functional relations such as between cause and effect and analysing logical connections. Now learners explore causes and effects, develop chains of reasoning and explain patterns.

- (ii) *Analysing Critically* is a process of interrogating human intentions and interests. For any piece of knowledge, action, object or represented meaning we can ask the questions: Whose point of view or perspective does it represent? Who does it affect? Whose interests does it serve? What are its social and environmental consequences? This is the characteristic orientation of critique or critical pedagogies. *Analysing Critically* involves critical evaluation of your own and other people's perspectives, interests and motives. In this knowledge process, learners interrogate the interests behind a meaning or an action, and their own processes of thinking.

Applying

Applying is a knowledge process in which learners actively intervene in the human and natural world, learning by applying experiential, conceptual or critical knowledge – acting in the world on the basis of knowing something of the world, and learning something new from the experience of acting. This is the typical emphasis of the tradition of applied or competency-based learning. Applying occurs in unexceptional ways in the everyday realm of the lifeworld. We are always doing things and learning by doing them. We learn by application in the lifeworld in ways which are more or less unconscious or incidental to the process of application, in ways which, in other words, are endogenous to that lifeworld. Application in pedagogy is a process in which knowledge is taken out of an educational setting and made work beyond that setting. It translates exophoric reference into real-world or simulated practice. Applying is about as real as education gets, albeit not as endemically real as the unconscious applications that are of the lifeworld itself. Applying can occur in two ways:

- (i) *Applying Appropriately* is a process by means of which knowledge is acted upon or realised in a predictable or typical way in a specific context. Such action could be taken to meet normal expectations in a particular situation. For instance, objects are used in the way they are supposed to be, or meanings are represented in a way which conforms to the generic conventions of a semiotic or meaning-making setting. Never does *Applying Appropriately* involve exact replication or precise reproduction. It always involves some measure of transformation, reinventing or revoicing the world in a way which, ever-so-subtly perhaps, has never occurred before. *Applying Appropriately* entails the application of knowledge and understandings to the complex diversity of real world situations and testing their validity. By these means, learners do something in a predictable and expected way in a 'real world' situation or a situation

that simulates the 'real world'. This pedagogical weaving brings learners back to the world of experience, but a world into which they have transferred understandings developed in other knowledge processes.

- (ii) *Applying Creatively* is a process which takes knowledge and capabilities from one setting and adapts them to quite a different setting: a place far from the place where that knowledge or those capabilities originated, and perhaps a setting unfamiliar to the learner. In this knowledge process, learners take an aspect of knowledge or meaning out of its familiar context and make it work – differently perhaps – somewhere else. This kind of transformation may result in imaginative originality, creative divergence or hybrid recombinations and juxtapositions which generate novel meanings and situations. *Applying Creatively* involves making an intervention in the world which is truly innovative and creative and which brings to bear the learner's interests, experiences and aspirations. It is a process of making the world anew, applying fresh and creative forms of action and perception. Now learners do something that expresses or affects the world in a transformative way, or transfers their newly acquired knowledge into a new setting.

This is a list of the kinds of things teachers and learners can do. They are the kinds of things that one does to know, in the premeditated reflective way that distinguishes the embedded knowledge of the lifeworld from knowledge deserving of the word 'science'. They are things you do which distinguish the pervasively everyday reality of informal learning from the relative formality, systematicity and focused nature of 'education'. Science and pedagogy alike are agents in knowledge-journeys which create 'out-of-the-ordinary' knowledge, knowledge which is simultaneously grounded in the lifeworld but deeper and broader and thus more trustworthy and reliable than knowledge gained from commonsense living in that world.

In this conception, pedagogy is a process of deliberate and purposeful shunting backwards and forwards between different acts of knowing, calibrating their insights against each other. Education is a business broadening not just learners' knowledge, but their repertoires of knowledge-making action. Pedagogy is the design of knowledge-action environments: choosing activity types, sequencing activities, transitioning from one activity type to another and determining the outcomes of these activities.

In the everyday practicalities of pedagogy, talk of knowledge repertoire becomes a way for the teacher or learner to say explicitly, 'now I am using this particular way to know, and, now I am using that other way, and here is the reason why I did this, then that'. By the end of a learning experience, both learner and teacher are able to say, 'this is what we have done to know, the journey we have taken through a range of knowledge processes', and 'this is the knowledge

we have acquired and the knowledge-abilities we have developed'.

The idea of a knowledge repertoire is the basis for a purposeful, deepened and broadened conception of science (what are the conditions of the more resilient knowing that we would call 'science?'), of pedagogy (how do we come to know in ways which are peculiarly educational?), and of a metascience as the foundation for a metadiscipline of education (how do we know how we come to know?).

Education

Education is learning that has been consciously and purposefully designed. It concerns us with the localised action sequences of pedagogy, the curricular designs based on disciplinary schemas or domains of practical action, and the institutional, architectonic and discursive field.

Education teaches us how to work at our knowing and shape our being. The science of education explores the sources and outcomes of deeper and more discerning ways of knowing than are possible in casual, lifeworld experience, and how they are acquired. Learning is coming to know and to be. Education is the science of how we come to know and be. Doing education as a discipline and as a profession, we come to know how we come to know and come to be how we become. This is why education is a metadiscipline, the science of sciences.

Speaking practically, the profession of education has a special place, too, as the intellectual profession par excellence. Its business is knowledge in all of its forms, in every domain of human experience and the natural world, and at every stage in life's journey. There is nothing known that can't be learnt, and nothing unknown that might not be learnt, personally or collectively. This makes education a peculiarly meta-profession, consistent with its being a metadiscipline which uses a metascience for its tool of trade.

Why, then, are the fruits of the academic field of education so often so intellectually disappointing, and so socially unimaginative? A sociologist might warn that education is one of the key sites of socialisation and social control, and this in part explains its narrow instrumentalism. It might seem dangerous to allow that education be otherwise. The instrumentalism of 'teacher training' means that the discourses, institutions and architectures of education are the stuff of tacit understanding, of silently shared and unquestionable assumptions rather than explicit exegesis, critical analysis or experimental innovation.

Our times, however, may not allow education to remain a quiet intellectual backwater and a site of social quiescence. We face huge challenges: of environment, inequality, globalisation, unprecedented technological change, human diversity, more distributed knowledge systems, and

changing patterns of agency which portend a more participatory culture (Kalantzis 2006; Cope and Kalantzis 2007). These forces threaten profound disruption of education's heritage institutions and discourses. Education may find itself with little alternative but to rise to these new occasions. Today, education needs to be as big as the fundamental challenges of our time if it is to live up even to a part of its expanded intellectual and practical promise.

Our times, indeed, may insist that we think in this broadly. Knowledge systems are more distributed than ever, and we rely for our knowing and learning on the scaffolds of collective intelligence. New sensibilities of agency and participation, amongst younger people particularly, are increasingly likely to resist the heritage routines of schooling which cast them as comparatively passive receptors of knowledge. Learner diversity creates an insistent demand that conventional schooling with its one-size-fits-all curriculum, is abandoned for pedagogies and institutions that are more inclusive. There are also increasing expectations that education should demonstrate that its pedagogies work: crudely through today's testing regimes, but perhaps these demands and their accompanying politics will become more sophisticated, and more consonant with the logistics of a society that values innovation, creativity and initiative rather than pat repetition of correct answers.

Our times also offer us a strategic opening in the form of the emerging 'knowledge society', now widely regarded as a key to our manifold contemporary challenges (Peters 2007). Even if the rhetoric sounds overblown at times, this is a strategic opportunity for us. The future of employment will be in the knowledge dimension of work and the deepened value of 'human resources'. The future of the planet will be ensured by the frugal use of natural resources and physical capital complemented by a generous investment in knowledge resources and intellectual capital. The destiny of nations will lie in their capacities to compete in the global 'knowledge economy'. The fate of organisations will be determined by their success in 'knowledge management'. The life chances of persons will be determined by their capacities to draw upon and contribute to collective intelligence, their proclivities to creativity, their willingness to take risks, their abilities to innovate and their propensities to collaborate.

These are all good reasons why education can, and now should, make the move to intellectually higher ground and take on practically more ambitious goals. Education's agenda is no less than human-transformative. It is learner-transformative (the enablement of productive workers, participating citizens, and fulfilled persons). And it is world-transformative as we interrogate the human nature of learning and its role in imagining and enacting new ways of being human and living socially: shaping our identities, framing or ways of belonging, using technologies,

representing meanings in new ways and through the new media, building participatory spaces, and collaborating to build and rebuild the world.

These are enormous intellectual and practical challenges for education. They are big enough to justify a claim by education to be a metadiscipline.

Notes on Contributors

Mary Kalantzis has been Dean of the College of Education at the University of Illinois, Urbana-Champaign since 2006. Before then, she was Dean of the Faculty of Education, Language and Community Services at RMIT University in Melbourne, Australia, and President of the Australian Council of Deans of Education. With Bill Cope, she is co-author or editor of: *The Powers of Literacy* (1993), *Multiliteracies: Literacy Learning and the Design of Social Futures* (2000), *New Learning: Elements of a Science of Education* (2008), and *Ubiquitous Learning* (2009). <http://marykalantzis.com>

Bill Cope is a Research Professor in the Department of Educational Policy Studies at the University of Illinois, where has been a faculty member since 2006. He is also Director of Common Ground Publishing, a company which develops mixed medium print and internet publishing software located in the Research Park at the University of Illinois. He is a former First Assistant Secretary in the Department of the Prime Minister and Cabinet and Director of the Office of Multicultural Affairs in the Australian Federal Government. His most recent books are edited collections, *The Future of the Book in the Digital Age* (2006), and *The Future of the Academic Journal* (2009). <http://wwcope.com>

References

- Blackburn S (2005) *Truth: a guide*. Oxford University Press, Oxford
- Cazden CB (2006) Connected learning: "weaving" in classroom lessons. In: *Pedagogy in practice 2006 conference*, University of Newcastle, Newcastle
- Chalmers AF (1976) *What is this thing called science?* University of Queensland Press, St Lucia
- Cope B, Kalantzis M (eds) (2000) *Multiliteracies: literacy learning and the design of social futures*. Routledge, London
- Cope B, Kalantzis M (2007) New media, new learning. *Int J Learn* 14 (1):75–79
- Cope B, Kalantzis M (2009a) 'Multiliteracies': new literacies, new learning. *Pedagogies Int J* 4:164–195
- Cope B, Kalantzis M (2009b) Ubiquitous learning: an agenda for educational transformation. In: Cope B, Kalantzis M (eds) *Ubiquitous learning*. University of Illinois Press, Champaign, pp 3–14
- Damasio AR (1994) *Descartes' error: emotion, reason and the human brain*. Penguin Putnam, New York
- Deacon TW (1997) *The symbolic species: the co-evolution of language and the brain*. W.W. Norton, New York
- Donald M (2001) *A mind so rare: the evolution of human consciousness*. W.W. Norton, New York

- Erikson F, Gutierrez K (2002) Culture, rigor and science in educational research. *Educ Res* 31(8):21–24
- Goody J (1977) *The domestication of the savage mind*. Cambridge University Press, Cambridge
- Husserl E (1970) *The crisis of European sciences and transcendental phenomenology*. Northwestern University Press, Evanston
- Kalantzis M (2006) Changing subjectivities, new learning. *Pedagogies Int J* 1(1):7–12
- Kalantzis M, Cope B (2005) *Learning by design*. Victorian Schools Innovation Commission, Melbourne
- Kalantzis M, Cope B (2008) *New learning: elements of a science of education*. Cambridge University Press, Cambridge
- Koch C (2004) *The quest for consciousness: a neurobiological approach*. Roberts and Company, Englewood
- Luria AR (ed) (1976) *Cognitive development: its cultural and social foundations*. Harvard University Press, Cambridge
- McGinn C (2004) *Mindsight: image, dream meaning*. Harvard University Press, Cambridge
- Ong WJ (1982) *Orality and literacy: the technologizing of the word*. Methuen, London
- Peters MA (2007) *Knowledge economy, development and the future of higher education*. Sense Publishers, Rotterdam
- Popkewitz TS (2004) Is the National Research Council Committee's report on scientific research in education scientific: on trusting the manifesto. *Qual Inq* 10(1):62–78
- Rizvi F (2007) Internationalization of curriculum: a critical perspective. In: Mary H, Levy D, Thompson J (eds) *Handbook of international education*. Sage, London, pp 390–403
- Shavelson RJ, Towne L (eds) (2002) *Scientific research in education*. National Academies Press, Washington, DC
- Vygotsky L (1934/1986) *Thought and language*. MIT Press, Cambridge, MA
- Vygotsky L (1962) *Thought and language*. MIT Press, Cambridge, MA
- Vygotsky LS (1978) *Mind in society: the development of higher psychological processes*. Harvard University Press, Cambridge

Education, Science and the Lifeworld: A Response to “Education Is the New Philosophy”

14

Norm Friesen

Abstract

Kalantzis and Cope set for themselves an ambitious and (in part) commendable task in “Education is the New Philosophy:” to re-think the disciplinary underpinnings of education, and to elevate it from an applied sub-discipline to an undertaking on par with “big science.” This chapter explains why a re-thinking of education and its disciplinary positioning is valuable, but it also takes issue with the unqualified reach of Kalantzis and Cope’s argument. To aver that education is an ordinary science and science for all sciences, is to take the current move to the “sciences” in educational discourse (learning sciences, brain sciences, et cetera) to a level not known in the Western tradition since the optimism of the enlightenment of the eighteenth century. My response concludes by making the case that education is less of a “positive,” unifying metadisciplinary enterprise than it is an engagement with negativity, in its dialectical sense – with that which is *not*, not yet and not known.

Keywords

Science • Disciplinarity • Education • Lifeworld • Epistemology

Understood in general terms, the task that Kalantzis and Cope set for themselves in “Education is the New Philosophy” is both ambitious and commendable. Their task, in short, is to re-think the disciplinary underpinnings of education, and to elevate it from an applied sub-discipline, subordinate to sociology and psychology, to a much more prominent scholarly undertaking. This re-thinking requires Kalantzis and Cope to revisit many of the fundamental cornerstones of educational – and indeed disciplinary – inquiry and to invest them with new meaning and resonance.

Education is in need of re-thinking, perhaps perpetually so, since it is, as Kalantzis and Cope point out, closely related to “the foundational and expansive question[s] of knowing and becoming” (p. 104). Though they do not use these words, one could extend Kalantzis and Cope’s claim by saying that education is concerned with the production

and reproduction of society and knowledge itself. It therefore has an intimate connection to the fundamental questions of epistemology, ontology, and philosophical anthropology (i.e. what it is to be human). Following this line of argumentation, it is not difficult to agree further with their chapter’s motivating premise that the status of education as an applied discipline, subordinate to scientific enterprises like psychology or cognitive science, should indeed be reconsidered. At the same time, it is important to recall that this is not a new claim for education. To take just two examples, similar arguments have been made in earlier American discussions of education and disciplinarity (e.g. Hoskin 1993), and much earlier in the German context, by Nohl (1928), as discussed by Biesta (2009). In both cases an argument is being put forward that education should be regarded as an autonomous discipline in its own right. Also in both cases, this argument is made by staking particular claims for education that clearly circumscribe its disciplinary remit, however vaguely: as induction into communicative practices and techniques (Hoskin), and as the dialectical unfolding of the self in society (Nohl).

N. Friesen (✉)
School of Education, Thompson Rivers University,
Kamloops, BC, Canada
e-mail: nfriesen@tru.ca

Kalantzis and Cope go further, indeed much further, and argue that education should be more than an autonomous discipline. Education, they assert, should be seen as superordinate to other disciplines – whether humanistic or natural scientific. In the sub-title of their chapter, Kalantzis and Cope state that they are making nothing less than “a metadisciplinary claim for the learning sciences.” Their argument admittedly is more forthright than many discussions of the learning sciences, which trade on the inherent ambiguity of the term “science” (e.g. Sawyer 2006), appealing to a wide range of educational scholarship while drawing on the authority reserved to the natural sciences. From the start, Kalantzis and Cope acknowledge that speaking meaningfully of an (inter)disciplinary reconfiguration of education calls for a redefinition of science itself. Science, as Kalantzis and Cope make clear, needs to be understood as designating rigorous, scholarly and systematic inquiry generally, as applied to philosophy as well as medicine, or to instructional design as well as to engineering. Kalantzis and Cope also plausibly explain that this redefinition involves a broadened understanding of what is admitted as legitimate “scientific” knowledge. This of course includes not only “conventional” empirical and abstract forms, but also, knowledge systematically derived from the lifeworld – the world of everyday concerns and particularities:

Science has a basis in *lived* experience. . . . But [the study of lived experience must] involve a concentrated focus [and process]. . . . This kind of knowledge process might involve protocols for listening to voice, feeling the sensual, recognising the embodied, framing the performative, accounting for the complex layers of the lifeworld, explaining the politics of identity or understanding the intuitive. (p. 108)

In thus defining scientific knowledge as including forms based on both scientific abstraction and lifeworld concretion, Kalantzis and Cope have occasion to articulate a critique of one-sided, natural-scientific conceptions of education as a measurable and optimizable “intervention.” They criticize the *No Child Left Behind* policy of Bush and Obama and inveigh against visions of education that “assert that only a certain kind of empirical research and controlled experimentation – x initiative leads to y measurable results – is worthy of the name ‘science’” (p. 104). Again, critiques of artificially narrow empirical criteria and their instantiation in policy may be laudable, but it is the overall direction of Kalantzis and Cope’s augmentation that gives rise to difficulty.

The problem is that Kalantzis and Cope’s arguments rely on an a-historical and all-embracing definition of disciplinary knowledge that leaves little room for contestation and critique between the disciplines and their respective knowledge forms. As is intimated in their own criticism of narrowly empirical approaches to educational evaluation, the relationship between knowledge associated with the

lifeworld and with the natural sciences is not necessarily one of mutual accommodation and reinforcement. Also, the history of understandings of this relationship does not bode well for Kalantzis and Cope. A convenient point of reference in this regard is provided by the single philosophical text mentioned this discussion of “the new philosophy.” This text is Edmund Husserl’s *The Crisis of European Sciences and Transcendental Phenomenology* (1954/1970):

Husserl draws the distinction between ‘lifeworld’ experience and what is in [sic] ‘transcendental’ about science The ‘lifeworld’ is everyday lived experience. It is a place where the one’s commonsense understandings and actions seem to work instinctively – not too much conscious or reflective thought is required. The ‘transcendental’ of science is a place above and beyond the commonsense assumptions of the lifeworld. . . . Science is focused, systematic, premeditated, reflective, purposeful, disciplined and open to scrutiny by a community of experts.

Science for Kalantzis and Cope is as clearly distinct from unreflective lifeworld knowledge or experience as it was Husserl. Also, like Husserl, Kalantzis and Cope see the rigors of disciplinary scrutiny as being capable of elevating this unreflective knowledge to a higher epistemic order.¹ But after this point, Kalantzis and Cope part company with Husserl. In *The Crisis of European Sciences* in particular, Husserl is not drawing an initial distinction between natural scientific and lifeworld knowledge only to later affirm their ultimate reconciliation through the rigors of disciplinary effort. In fact, Husserl and the many studies and theories of the lifeworld coming after foreground the problematic *opposition* of these two types of knowledge. This is perhaps nowhere more powerfully articulated in *The Crisis of European Sciences* itself, which Kalantzis and Cope see as so amenable to their purposes. Speaking of the natural sciences in terms of the paradigmatic significance of mathematics and geometry, Husserl explains:

In geometrical and natural-scientific mathematization, in the open infinity of possible experiences, we measure the lifeworld – the world constantly given to us as actual in our concrete world-life – for a well-fitting *garb of ideas*, that of the so-called objectively scientific truths. Mathematics and mathematical science, as a garb of ideas, or the garb of symbols of the symbolic mathematical theories, encompasses everything which, for scientists and the educated generally, *represents* the life-world, *dresses it up* as “objectively actual and true” nature. It is through the garb of ideas that we take for *true being what* is actually a *method*. (p. 51; original emphases)

Science relates to the lifeworld and knowledge of it, according to Husserl, as nothing less than a cover, a misrepresentation, perversion or falsification. The authority of the

¹ Husserl understood this “science of the lifeworld” as rather different than a natural science (namely, as a neo-platonic realm of experiential essences) hence his response of a *transcendental* phenomenology to the crisis of European (or Western) sciences.

natural-scientific, Husserl asserts, derives from an error: The mistake of taking its method, its epistemological rules, as "true being" – the error of mistaking science with what there is to know in the first place.

Where Husserl sees epistemological difficulty and division, Kalantzis and Cope see convergence and synthesis. Moreover, they designate the site of this convergence and synthesis "education" – saying that education has its locus "at the interface of the lifeworld and science" (p. 106). In this context, education is not simply a discipline with the same claim to disciplinarity as any other. It acquires an "*ur*-disciplinary" status: "You can't do any other disciplines," Kalantzis and Cope say, "except through the medium of education." Their argument is that if science is somehow the fusion of abstract scientific and "focused" lifeworld knowledge, it is (and has been) nowhere more effectively integrated than in education. Education, as Kalantzis and Cope put it, has always had as one of its principal tasks this type of epistemological synthesis:

The intellectual and practical agenda of education is no less than to explore the bases and pragmatics of human knowledge, becoming and identity. Education asks this *ur*-disciplinary question: How is it that we come to know and be, as individuals and collectively? . . . Education[']s focus, no less, is how one comes to know in ways that are more than unconsciously and unreflective embedded [sic] in the lifeworld. This is big science and deeply significant science, in the service of all disciplines. (p. 106)

But even this is not enough for Kalantzis and Cope. Education is not only a precondition for and equal of the "big science" of particle accelerators and missions to Mars. More than the science that lies at the beginning and ending of other scientific endeavour, it is nothing less than "a science for all sciences," a "metadiscipline." Given its concern with the question of "how is it that we come to know and be, as individuals and collectively?" education lays claim, Kalantzis and Cope argue, to the status of a discipline of disciplines – the new philosophy.

More than the equal of other disciplines, education is the soil in which all the other disciplines grow. . . It is what it does. Education is about knowing and becoming, and knowing is the foundational question for all intellectual and much practical work.

Education is both precondition and performance, both abstract theory and its lifeworld instantiation, both abstract universality and concrete particularity; it gives birth to other disciplines and receives them to its bosom should they expire. Incredibly, Kalantzis and Cope want nothing less than to take us to the dawn of a new scientific, interdisciplinary era, but we arrive there by way of a night in which all cows are black, rather than one in which Minerva's owl might take flight.

It is difficult to know how to judge the case made by Kalantzis and Cope, since claims this bold concerning the coherence and unity of human knowledge are more the province of historical investigation than they are of contemporary argumentation: Talk of a "science of sciences" is clearly more at home in the era of the French *encyclopédie* or of German idealist systematizing than in our own age. At the same time though, the acceptance of the authority of the "scientific," and assumptions concerning its underlying compatibility with humanistic knowledge are hardly new. Looking at claims being made in recent American studies of education, philosophy and literary theory concerning "learning science," "brain science," and "chaos science" (terms with which no natural scientist would readily self-identify), it is evident that Kalantzis and Cope are not alone. The skepticism or even hostility of earlier postmodern theorizing to science and to moments of synthesis and totalization, it seems, have been forgotten. There is no apparent need to engage in a dialogue with the German thinkers (Nietzsche, Heidegger, to say nothing of Husserl) and their French interpretants (Foucault, Derrida) who were all once so fashionable.

Instead, we find a discourse that references natural science and its findings as approvingly as one might have once referenced Baudrillard or Lyotard. In place of critical postmodern skepticism, this discourse is characterized something that can be termed *positive*. Positive is meant here in many (but not all) of its mutually-reinforcing senses: as simple affirmation (rather than critique), as a shorthand for epistemological certitude, and as designating that which is "given" (as opposed to the "negativity" of that which is potential or inexistent). Negativity, that which is *not* given, that which affords the possibility of something different and uncertain (and thereby critique *of* the given), is difficult to find. This is neatly illustrated in the conclusion to Kalantzis and Cope's chapter. After claiming that education is nothing less than a science of the sciences, they seek to justify its existence in terms subservient to the "positive" realities of that 'most dismal' of sciences, economics:

Today, education needs to be as big as the fundamental challenges of our time . . . The future of employment will be in the knowledge dimension of work and the deepened value of 'human resources' . . . The destiny of nations will lie in their capacities to compete in the global 'knowledge economy'. The life chances of persons will be determined by their capacities to draw upon and contribute to collective intelligence. . . (p. 114)

If education holds any grand promise as a discipline, it is surely to be found in its *negativity*, in its ability to imagine and cultivate the possibility of a world that is different from our own. Rather than affirming a global system of capital, education's focus should be negative in all of the senses

implied above: Critical of and posing alternatives to the given, and emphasizing the negativity that Hannah Arendt (1958) called “natality” – the indeterminable and in this sense “negative” potential and promise of the students and children that are entrusted to it.

Note on Contributor

Dr. Norm Friesen is Canada Research Chair in E-Learning Practices at Thompson Rivers University in Kamloops, British Columbia, Canada. Dr. Friesen is author of *Re-Thinking E-Learning Research: Foundations, Methods and Practices*, and also of *The Place of the Classroom and the Space of the Screen: Relational Pedagogy and Internet Technology*. Dr. Friesen is co-editor of the journals *Phenomenology & Practice* (www.phandpr.org) and *E-Learning and Digital Media* (www.worlds.co.uk/elea/). He is Director of the New Media Studies Research Centre (nms.tru.ca), and is presently undertaking federally-funded research in media and education and media theory.

References

- Arendt H (1977) [1958] The crisis in education. In: *Between past and future: eight exercises in political thought* (trans: Lindley D). Penguin, New York, pp 173–196
- Biesta G (2009) *Disciplinary and interdisciplinarity in the academic study of education: comparing traditions of educational theorising*. A paper presented at the annual conference of the British Educational Research Association, Manchester. Retrieved from: http://www.ioe.stir.ac.uk/documents/DisciplinarityandInterdisciplinarityintheAcademicStudyofEducation_ComparingTraditionsofEducation.pdf
- Hoskin KW (1993) Education and the genesis of disciplinarity: the unexpected reversal. In: Messer-Davidow E, Shumway DR, Sylvan DJ (eds) *Knowledges: historical and critical studies in disciplinarity*. UP of Virginia, Charlottesville, pp 271–305
- Husserl E (1970) *The crisis of European sciences and transcendental phenomenology*. Northwestern University Press, Evanston
- Nohl H (1928/1987) *Die pädagogische Bewegung in Deutschland und ihre Theorie*. Klosterman, Frankfurt
- Sawyer RK (ed) (2006) *The Cambridge handbook of the learning sciences*. Cambridge University Press, Cambridge

Part II

Characterising Research in Education

Alan D. Reid

Abstract

This chapter introduces the contributions to the *Companion* that focus on how research in education might be characterised and caricatured. It illustrates conversations, debates and alternatives about, for example, ‘the science of educational research’, why these might travel with us, and how they unfold and evolve both within and outside the education research community. If the experience of working with a *Companion* has more than rhetorical resonance with the notion of ‘breaking bread with another’, then a certain intimacy, symbolic sensitivity and explicitness with key themes must be exemplified in its pages. While to extend our core metaphor for the volume, perhaps we can liken this Part as prompting reflection on the notion of ‘companion planting’: of ideas, qualities and themes that might enhance opportunities for growth, cross pollination, and protection of the other from ‘pests’ or disease. Throughout, contributions engage, what is the character and characteristics of our practice and discourse, and does it matter if particular ‘characters’ come to dominate our thinking, or retire from view? Put otherwise, how might a polyculture rather than monoculture of thinking about researching education be maintained and developed, and is that to be preferred and exemplified in our discourse, or must it take on, even stick with, a characteristic form?

Keywords

The character of educational research • Caricature • Scientific educational research • Epistemic community • Metaphor and imagination in research

What sounds like a ‘bum note’ being struck in education research? When and where does it matter if the preferred ‘flavour’ or ‘tone’ of one’s approach has limited appeal to others? Which traditions of inquiry seem to offer little more than a ‘dead hand’ to finding ways to reanimate or liberate what we characterise as educational research of good quality? If you had to characterise your research as having a particular ‘smell’ or ‘feel’ to it, what would you say?

As noted in the Introduction, one of our key aims in preparing a *Companion* was to provoke different ways of

viewing research among students and researchers, particularly as to the ways in which we grasp how educational inquiry is variously conceptualised, characterised, contextualised, legitimated and represented. In our teaching, we have used these thematics as a way to tease out ‘the weft to the warp’ of our usual topics of educational research preparation and development, particularly when these seem to be overtaken by a focus on methods and methodology in our standard texts, assignments, supervisions and capacity building for novice to more experienced researcher alike.

As with our opening provocations, we have deliberately sought opportunities to rework our ways of thinking on these matters, pursuing questions that afford lively discussion of our kaleidoscopic concerns to shift attention towards creative, careful and critical engagement with other-than-usual

A.D. Reid (✉)
Faculty of Education, Monash University, VIC 3800, Australia
e-mail: alan.reid@monash.edu

ways of talking about research (see Lather 2006). Principal among these are using such lenses to pursue questions of interaction and refraction, such as in relation to the following:

- What it might mean to research in a particular instance, and how do we recognise and reason this?
- From where and whom are our research topics generated and critiqued, in general, and for this situation?
- What might be revealed and hidden when educational researchers carry out an inquiry? And,
- How are the subjects, objects and relations of a study rendered researchable; indeed, are our current repertoires and discourses of ‘methods and methodologies’ sufficient to the task at hand?

Whether and however we approach such questions in our activities, (for example, we’ve used reading groups, ‘expert witness sessions’ and ‘fishbowl conversations’), our experience suggests a common feature of falling back on particular characterisations of what we ascribe to the theory and practice of researching education, even as we try to dispel certain myths or avoid troubling caricatures.

In this Part of the *Companion*, we illustrate examples of such methods, by bringing together a series of contributions that offer tracings of the effects of particular characterisations of educational research. Our ‘lead characters’ are familiar; others are, of course, available or tend to be better suited to other venues. In this instance, we consider when educational research needs to be ‘scientific’, subject (or not) to particular standards of logic and investigation, philosophically astute or relatively blunt, as (in)sensitive to or (dis)interested in contextual challenges and pressures, as essentially amorphous and/or emergent in practice, and/or exemplifying the outworkings of a tightly defined design (because, for example, it is inspired by applying a particular thinker’s ideas or concerns to the carriage of the research such as, Michel Foucault’s).

Characterising research as an art, for example, suggests different priorities and questions; while we don’t address these here, possibilities are suggested in the contributions to the Conceptualising, Representing and Legitimising sections of the *Companion*. Yet it is in positing such distinctions that we must also remain mindful to the fact that educational research means different things to different people within and outwith the academy. It suggests to us that any creative, careful and/or critical attempt to offer a history of educational inquiry, plotting its various developments and ruptures in light of successive waves of thought, practice and critique, must present the reader with evidence of reasoned multiplicity and selectivity (again, see for example, Lather 2006), and the first Part of the *Companion*).

In our teaching, we have found that this can lead to critical debate and reflection on various disquisitions on the features of inquiry, even if these are usually indexed to the features of (and departures from) empiricism, and as such, prompt further critique about that which characterises, and possibly caricatures, research in education. If, for example, understanding the terms and features, illustrations and critiques of empirical research is to the fore, we cannot avoid discussing expositions on science and research, of whether educational research is essentially scientific (whose science? When? Where? etc.), or perhaps more importantly for our purposes with students, could it be characterised otherwise.

Carrying such discussions forward, as exemplified in the preceding Part on *conceptualising* research in education, we have also found that addressing deeper questions of quality research receives little assistance from focusing primarily on the choice of technique or conformity to procedures and traditions of research design. In fact, we have often found ourselves wondering, may quality be more a feature of the ways the study and those involved in it, have opened up questions as to how an inquiry illuminates and/or occludes the various subjects, objects and relations involved in a particular instance of researching education?

This alternative proceeds on our understanding of research in education as that which remains *structurally open but constrained* as a field of inquiry; in other words, what is to be known and characterises diverse ways of knowing via research is neither fixed nor settled for this field, even if particular expectations and features endure. There may be particular patterns or breaks in disciplines and traditions as discussed in the preceding Part of the *Companion*; but what is more at issue is what now counts as research in education, given that it remains under review and development because of the new learning and thinking about what we have done, do, and might well need to do. Traditions are created as much as they might be overturned or renewed. Thus, in its institutionalised forms, in academia, publications and training programmes, we have to recognise that what is argued to count as research in education starts from somewhere rather than nowhere, and someone rather than no-one. In other words, there are schools of research, key texts and debates, groups and groupings in epistemic communities, and so forth, such that these ensure that research always takes on a particular range of characteristics and complexions, depending as these do on conception, context, purpose and people. However, if we remain part of a closed community, or even so faithful to our training we act as if it can’t be doubted or rejected, let alone deepened or renewed, we might also need to engage the prospect of w(h)ither healthy dialogue between and across diversity?

Against Caricature

Given such initial considerations, to further introduce, understand and critique how educational research might be *characterised* (rather than *caricatured*), we use this Part to invite reflection on:

- how particular characteristics are constituted by and constitutive of the theories and understanding of education, research and educational research, and (if not to stretch a point too far),
- also make sense to our considerations of the thinkers, teachers and technicians of researching education.

This work requires a different kind of toolkit than that usually expected of a research text. It has to both cope with and anticipate some of the complex and dynamic ways of thinking about and engaging the researching of education within not just the terrains and contours of the field, but also with clear vision of local and wider debates about its ‘character’, ‘characters’ and ‘characteristics’.

A quick route into these issues is to consider what we know of those we cite, learn from and talk back to in research texts. How do we use their words and ours ethically as we variously ‘text up’ research interests, passions, strengths, and shortcomings? Be they of the ‘researchers’ or ‘the researched’, what effects do these characterisations as selections from others’ lives and commitments have on how we conceive educational research in particular situations, and more broadly?

We can variously suspect as well as detect particular biases in others if not ourselves, even if that is not to deny that these are a part of what makes us human. We have affect and will, flaws and blind spots, as well as a need to recognise the ‘need for the other to make us whole’, for example. While if we are to play this line out further, the requisite sensibilities of researchers discussing educational research are clearly not just philosophical: they can be anthropological, sociological and historical, with strong cultural, relational and political connotations not far behind. This is because in pursuing the question of how we know what we know and the relationship between the knower and the known, whether we are in or outside a defined ‘epistemic community’, we are never ‘disembodied’. The assumption at work here is that given we treat people as having character (and can be characterful, if not regard some as rather characterless), perhaps it is not too far a stretch to recognise we imbue our research with particular characteristics too, be that because of the people we are, the people we learn from, or what or whom it is we seek to emulate or distance ourselves from as we carry out our research.

Similarly, that which is intelligible is only intelligible in the frame of human lives and our diverse ways of knowing. Thus a key issue for education researchers in teasing out

research of ‘good character’ or ‘poor caricature’ so to speak, is to understand the wider qualities, authority and legitimacies claimed for a particular instantiation of education research in relation to a body of inquiry and scholarship. This may include the practices of power used by people and their discourses to invest specific inquiries as authoritative and legitimate accounts of education phenomena, and thus a particular set of claims and meanings of some aspect of the wider world.

Questions then about how a research community comes to understand and contest what characterises that which education research has been, is, and might be(come), have remained key framing considerations for inviting the contributions to this Part of the *Companion*. While they may seem to pretend relatively simple, even trivial considerations, they may also occasionally require sophisticated, counter-intuitive answers. Equally, a quick scan of the Table of Contents to this *Companion* will illustrate that some contributions come from well-known ‘characters’ in the field of educational research, while others come from the perhaps lesser known or appreciated. It remains though that whatever one’s status (claimed, demonstrated or perceived), in consulting any of their contributions, for this Part they are underpinned by a recurring theme: *there are certain characteristics of researching education that should be highlighted, challenged or changed, and here are some of the reasons why.*

Overview of the Contributions

The first contribution to this Part, authored by D.C. Phillips, offers ‘A guide for the perplexed’ on questions of scientific educational research, methodolatry and standards. Drawing on an illustrious career’s worth of interest in philosophical issues arising from analysis of the context, concepts and character of educational research, his chapter distils a series of broader arguments about the various assumptions, vocabularies and continua that underpin different forms of ‘scientific educational research’, including their representation and misrepresentation in current discourse. A response from Jānis Ozoliņš explores one major aspect of Phillips’ focus, on the relativisation of debate about inquiry and standards. Ozoliņš warns against throwing the baby out with the bathwater when we review the qualities of research, scientific or otherwise; that is, we need to pay close attention to how both the objective and subjective aspects of reality are characterised in a study, particularly if we entertain the claim that we are living in the shadow of a metaphorical ‘Tower of Babel’.

Darrell Rowbottom continues to explore such themes in the next chapter, by asking who is asking what (and from where) when we engage the characterisation of educational

research as scientific. He also asks, should we be worried about this, be that philosophically, pragmatically, or politically? Illustrated with examples from the philosophy of science and recent studies of science and educational research, Rowbottom focuses on how some of the most basic terms can be mischaracterised, resulting to what amounts to a caricature of both science and educational inquiry, and scientists and educational researchers, if not research programmes and possibilities in education. Responses from Richard Smith, and Sarah Jane Aiston, continue this thread by exploring arguments that the demand for educational research to be ‘scientific’ is fundamentally misguided on philosophical, theoretical and pragmatic grounds. Their contributions draw on illustrations of rhetorical excess and distortion to make their points. Their concerns about misrepresentation and mischaracterisation focus on the US discourse on ‘Scientific Research in Education’, and in Europe, on the ‘Challenges facing the educational system’ flowing from the ‘Vital Questions’ of social science. In short, they both argue that a key quality of an educational researcher is to continue to engage what counts as good inquiry, and that this should not be eclipsed by debating particular demarcations that only bring reification or division.

Michael Scriven’s overview of the logic of causal investigations illustrates the uses and abuses of particular claims-making strategies in random-controlled trials and quasi-experimental designs. His chapter also explores what this implies for assertions of allegiance to qualitative, quantitative or mixed method approaches, particularly if cooperation as well as competition in both claims-making and meaning-making are the ends-in-view for a broad-based, insightful educational research. Melvin Mark’s response identifies why we might regard some of the debates as offering ‘narrow victories’, before folding some of the language back on itself to show when Type I errors obtain with RCT-type studies, and why this must matter for critiquing and revising funding priorities.

Putting questions of generalizability and those of how a research text talks directly to each and every reader aside for one moment, taken together, this first set of contributions raises important questions about the sometimes doubtful, if not dubious, ways that educational research might be characterised. The remaining contributions take a different tack by exploring the ways in which we can understand the influence that some of the ‘characters’ we find in the discourse are put to work in educational research. Whether it is in relation to particular thinkers or educational researchers, or the advocates or critics of particular models or modes of researching education, the chapters and responses shift the discussion towards inviting a closer appreciation of the lives and minds that shape particular ways of developing and critiquing educational inquiry.

Marianna Papastephanou focuses her discussion on the case of educational action research. She considers key aspects of the positions adopted by Wilfred Carr, Stephen Kemmis, and John Elliott, and how these are appreciated and contested from the vantage points of postmodernism and critical theory. Whether it is in terms of juxtaposing a focus on immanence with transcendence, Olav Eikeland’s response affirms as well as confounds some of the components of Papastephanou’s arguments, showing where they are incomplete or inadequate given wider considerations and conventions – i.e. characteristics – of human culture. Educational research may resuscitate ‘older’ starting points for inquiry, as opposed to bring new fusions in our horizons, derived as the former might be from considering the work of Marx, Hegel, Kant, Wittgenstein, Hume, or Aristotle. Whether we characterise some and not others as the ‘Key’ or ‘Modern Thinkers’ of Education, we are invited here to countenance the need for representation from a broader spectrum of humanity (for example, Noddings, Greene, Donaldson and Darling-Hammond are only ever among the supporting cast in Joy Palmer’s (2001a, b) texts that adopt such a framing).

It is here that Eikeland expects claiming to ‘know something together’ to further a ‘double loop’ and not just ‘single loop’ of learning about the field and its focus, and its constitution and reconstitution, to borrow the terms used by Argyris and Schön (1978). Double loop talk invites educational research to be cast with those qualities of engagement that speak of inclusive dialogical activity: sorting and sifting differences and similarities in realities, experiences and meaning makings, be that through dialectics or deliberative *phronêsis*, or at the very least, ensuring the preconditions for such work are available in our communities and writings.

Paul Gibbs extends this discussion to consider what this means for the action researcher, particularly the teacher practitioner. Reintroducing ‘Heidegger’ to the conversation, questions of potentiality, actuality and capability are raised. Gibbs relates these to the constraints on professional practice and community, and how the power to enact them is achieved. But in not quite making a connection to a Keatsian ‘negative capability’, or to a Deweyan use of such considerations within pragmatism, or even to more recent flowerings of anti-foundationalism, the challenge of how it is that we characterise the power of, and powerful in, our thinking and reasoning about, educational research remains.

Our final contributions to this Part consider a particular case in point: the reception and influence of Michel Foucault’s work on studies in education (which includes, but is not limited to, his analysis of knowledge and power). Mark Olssen provides another update of his ongoing review of the impact of Foucault’s work in the social sciences, to consider how that frames and focuses particular pathways and goals for educational inquiry. Responses by Andreas

Fejes and by Naomi Hodgson discuss the likelihood of ‘eclectic uses’ of Foucault’s work in, for example, research on lifelong learning and post-compulsory education, alongside other ‘characterisations’, as in cases of using Foucault as an inspiration for an interpretative strategy, as a means for posing an argument, or even as ‘decoration’. From superficial or misplaced uses to revitalising a critical discourse, the concern both commentators raise is whether more radical questioning is possible in educational research, particularly if this is to be a key characteristic of (all?) educational research. In short, they charge that a failure to fully grasp the terrain and implications of the thinker’s work does a disservice both to what is interpreted as its potential contribution to the field, but also on what grounds educational researchers are able to prosecute and critique that within, and as, educational research.

A Question of Character

Readers of this part may need reminding that the opening Part of the *Companion* focused on how researching education is conceptualised to get to the heart of some of the cross-cutting issues mentioned above. Its contributions invited us to consider the currency and traction of particular concepts and conceptions of researching to the field of education – which ones, with what consequence, whose are they, and so forth – and how these are extended or challenged in the debates and developments that inform what passes as contemporary and possible educational research.

The other Parts to the *Companion* intersect with such initial considerations, but they are also intrinsically interrelated because they each continue to ask what is ‘before, behind, beneath or beyond’-type questions about the design, use and evaluation of research in education, albeit in different ways and with different lenses. From diverse vantage points, they often seem to converge on questions of quality, of what it is that is conceptualised, characterised, contextualised, legitimated and represented as exemplifying by talk of a ‘sound’, ‘rigorous’, ‘powerful’ and ‘effective’ way to research education.

The focus on conceptualisation in the preceding Part also posed questions about the often messy experience of conceiving educational research, including why it is that particular concepts and conceptions have come to inform what counts and is contested as research in this field. For example, if research is characterised as requiring intense, systematic and evidence-driven inquiry of educational phenomena to yield new meanings, understandings and insights, then we may expect ‘quality criteria’ to also address the intentions ascribed by researchers to a research project, or how these may drive the research questions and research designs of researchers, particularly if intentionality is a key site for

consideration in practising reflexivity. These qualities may differ from, say, those characterising an educational evaluation, which may not champion the equivalent intensities, depths or iterations of research as necessary or sufficient to what counts as evaluation. Evidence may, of course, be crucial to both, but the challenge here is to argue for the characteristics of one’s research as educational research, rather than leave others to make assumptions or draw unwarranted conclusions. While in so arguing, we may find we also have to engage matters of legitimation and how to represent the research in question to, and with, others.

Put otherwise, and to illustrate the kaleidoscopic aspects once more, consider the case and qualities of action research. As Papastephanou shows in this Part, we must marshal questions of concept and conceptualisation, even as these prompt various subquestions. How is action conceptualised in this instance of educational research? How else has it been characterised within education and research? Is the notion of researching action in education distinct from other contexts or concerns? Does that matter to the design, evaluation, application or critique of ‘educational action research’, and ‘educational research’ more broadly? Equally, what marks the researching of action or actions; are there historic characteristics, new conceptions, fresh contexts to consider? Is there a particular range of relations or qualities to be preferred here, and on what grounds?

Moving on: in probing what contextualises that research, we might also consider what decontextualises such studies, and to what consequence or effect? Thus, what is reasoned to be more or less legitimate or illegitimate as educational action research? And finally, how best might an educational action research project be represented, be that to the participants through to a wider audience? Must it be fundamentally similar across audiences or work through a variety of communicative forms, given the expectations and experiences of researching education held by insiders and outsiders to, in this case, educational action research approaches? (See the chapters by and responses to Robinson and McTaggart, for further discussion of such questions.)

The larger point at work here is how we ensure a *Companion* encourages reflection on how we characterise research in education, given the various networks and flows of concepts and meanings and their uses, that have come to constitute historic, contemporary and futures-oriented discourses about educational research. Critiques that focus on the quality of our concepts and claims typically question the qualities that instances, configurations and traditions of education research do or might display in our reasoning about a study. In so doing, they foment related questions of the character of research in education, e.g. about what is distinctive, and which resemblances are significant, in understanding research in education *as research*, as well as research *in education*. As raised throughout this second

Part of the *Companion*, we may then ask, in what ways does it matter if researching education is treated largely as a science, an applied science, a craft, even an art? Are these complementary or antagonistic options on both philosophical and/or practical levels? And, are these only ever decidable in the crucible of the research programme to which they are a part, or is this more a case of let a thousand flowers bloom, and beware the mower?

Also, in raising the prospect of caricature, we might also reframe and thus destabilise this question by inviting the reader to consider how we know when education research is in (or out of) character, so to speak. Contributions to this Part consider such thorny topics as which characteristics are seen to be essential for a particular expression of researching education amid a broader array of possibilities, even to the extent that we must consider which features or qualities may in fact be misplaced claims on the field. In other words, a focus on the ‘character of education research’ and general and particular characterisations, invites us to reflect on how any particular example of researching of education resembles or is distinguished from other instances, forms or modes of research, and of course, how it is portrayed in relation to others too.

Knowing and being able to effectively evaluate the field’s fluxes, be those of its membership, diversity, conduct, expression or the reputation of particular interpretations or representations of researching education, have remained the key impulses for this Part. Put differently, we invite readers to consider how we are able to effectively understand and communicate what is that is depicted, presented, categorised, classed, styled and marked as authentic and worthwhile features of an instance of researching education. What is typical and customary in one context say, may not apply in others, and on that note, it becomes clear that the focus on character must also lead us to consider *the contextualising of research in education*.

Thus the next Part is intended to invite discussion as to the contexts for researching education, and how context itself informs the very constitution of an education research project. In accounting for the characterisation and contextualisation of a study, what is expected is more than a description of the study context or its participants. As Michael Peters remarks in the next Introduction, it invites awareness of the pretexts and texts of the research, as well as the subtexts and meta-texts that shape the objects, subjects and relations of a study. To respond effectively, this too may

require creative, careful and critical review of earlier research, including in relation to blank spots and blind spots, but also a keenly felt sensitivity to how characteristics and contexts for inquiry change or shift when some claim to be researching education.

As illustrated in the contributions that follow in that Part, these may include appreciating what we once knew and now know about, for example, youth and childhood, about institutionalised and un-institutionalised forms of education, about diverse ways of knowing and their possible contestations and hybridizations in the ‘mainstream’ of research ... and so on and so forth. These too lead to questions of legitimation and representations, as taken up in the fourth and fifth Parts of the *Companion*. They may even return us to further questions of how the qualities of a study are characterised and authorised as a legitimate representation of researching of education, that is, defended and demonstrated with a particular logic or justified (as fitting, sound or right, for example), given the community’s deliberations on what *characterises* educational research of quality in and across specific research settings.

Note on Contributor

Alan Reid is an Associate Professor in the Faculty of Education, Monash University. He edits *Environmental Education Research*, and is a member of Monash’s Education, Environment and Sustainability Research Group. Until 2012, he worked at the Centre for Research in Education and the Environment, University of Bath, and is active in a range of environmental education research activities and networks, primarily in Europe, North America and Australasia. Alan’s research interests focus on teachers’ thinking and practice in environmental education, and traditions, capacities and issues in environmental education theory, research and practice.

References

- Argyris C, Schön D (1978) Organizational learning: a theory of action perspective. Addison Wesley Longman, Reading
- Lather P (2006) Paradigm proliferation as a good thing to think with: teaching research in education as a wild profusion. *Int J Qual Stud Educ* 19(1):35–57
- Palmer J (ed) (2001a) Fifty modern thinkers on education: from Piaget to the present. Routledge, London
- Palmer J (ed) (2001b) Fifty major thinkers on education: from Confucius to Dewey. Routledge, London

A Guide for the Perplexed: Scientific Educational Research, Methodolatry, and the Gold Versus Platinum Standards

16

D.C. Phillips

Abstract

The discussion opens by characterizing recent discourse about empirical educational research as the “new Babel” – critics, using different theoretical vocabularies and making different deep assumptions about the nature of social life, are failing to communicate with each other. After locating some of the critical positions on a left-right continuum, the main discussion focuses upon the end of this continuum where there are located the recent attempts to restore rigor in educational research by using the so-called “gold standard” of randomized field trials. It is argued that positions at this end of the continuum misrepresent the nature of science, and some examples are mentioned briefly to convey the point that it is fruitful to view scientists as making convincing cases, cases that appeal to a wide variety of evidence. The assessment of scientific cases is called the “platinum standard”.

Keywords

Gold standard • Randomized field trials • Nature of science • NRC report • Rigorous educational research

Overview

This chapter opens by characterizing recent discourse about empirical educational research as the “new Babel”: critics, using different theoretical vocabularies and making different deep assumptions about the nature of social life, are failing to communicate with each other. After locating some of the critical positions on a left-right continuum, the main discussion focuses upon the end of this continuum where recent attempts are located to restore rigor to educational research by using the so-called “gold standard” of randomized field trials. It is argued that positions at this end of the continuum misrepresent the nature of science, and some examples are briefly mentioned in order to convey the point that it is fruitful to view scientists as making convincing cases, cases that appeal to a wide variety of evidence. This assessment of scientific cases is called the “platinum standard”.

D.C. Phillips (✉)
Graduate School of Education, Stanford University,
Stanford, CA, USA
e-mail: d.c.phillips@gmail.com

Introduction: The New Babel

The Old Testament of the Bible tells us that Babel was the site of a great tower, the construction of which was interrupted because of “the confusion of tongues”, and the resultant inability of its builders to communicate with each other. When the languages being spoken were different, presumably disagreements could not easily be settled about the design of the tower and the methods to be used in its construction. It only requires a slight leap of the imagination to view educational research as the new Babel, although it is decentralized around the Globe rather than being located in one particular spot. Nevertheless, scattered as it is, the aspiration has been to construct a grand edifice – a towering international accumulation of reliable and practically useful results. This noble endeavor, unfortunately, could conceivably come to a standstill, the hoped-for grand structure replaced by a multitude of humble small piles of findings often of dubious worth, scattered among which is a multitude of dubiously-substantiated personal opinions and abstruse ideologies. All this because debate within the

research community is beset by a “confusion of tongues”, especially about the nature and validity of the research process itself. This confusion is amply illustrated by even just the titles of the papers in the four journal symposia that have appeared recently about the nature of scientific research in education (*Educational Researcher* 2002; *Qualitative Inquiry* 2004; *Educational Theory* 2005; *Teachers College Record* 2005).

It should be made clear at the outset that the problem is not simply a linguistic one – differences in language can, with effort, often be overcome. The problem is more like that of cross-paradigm communication in Thomas S. Kuhn’s original formulation – there is a gulf of incommensurability that makes communication across different scholarly traditions well-nigh impossible (Kuhn later backed-off and said “very difficult”; see Kuhn 1970), and that raises problems for that purported cornerstone of scientific rigor – the peer review process (whose peers? and who chooses them?). For the point is, differences in terminology mask many other differences often at a deep-seated level. By way of example, consider what assumptions underlie the following passage by Patti Lather; certainly they are so far removed from my own assumptions that communication and discourse become, if not impossible, extremely difficult – I doubt that we could construct an edifice of knowledge together. Lather wants to see an educational research that moves “toward a Nietzschean sort of ‘unnatural science’ that leads to greater health by fostering ways of knowing that escape normativity” (Lather 2004, p. 27). From my perspective, this is so murky and fraught with danger that if taken seriously it portends the extinction of the empirical research enterprise – how, for example, could an epistemology that eschews normativity lead to anything but relativistic chaos? The whole point of a “way of knowing” is that it is normative, otherwise just anything will do; without norms there is no “way”, no way for others to follow, at all!

Thus, underlying the cacophony of languages in educational research (the babble if not the Babel) there are what are close to being paradigmatic differences: There are different ideals or models for inquiry and hence different purposes to which its conclusions can be put, different views about the status of conclusions reached in inquiry (and about whether any conclusions – rather than opinions or political stances – can be formulated at all), different methodologies, different assumptions about the possibility or even the desirability of achieving objectivity, different stances with respect to the concepts of truth and reality, different attitudes towards reason and its efficaciousness, different presuppositions about how the social and educational worlds work and hence about the ways in which these interrelated realms can be understood, different views about the causative agents in the social world (causes that influence the researcher as much as the researcher’s human

subjects), different attitudes towards the issue of whether regularities in the social and educational worlds are uncovered by investigators or are constructed by them. There are those who believe that rigorous scientific research can pave the way to educational improvement (see for example Hargreaves 1997; Mosteller and Boruch 2002), and there are others who hold the view that “the forms of human association characteristic of educational engagement are not really apt for scientific or empirical study at all” (Carr 2003, pp. 54–5).

In the discussion that follows I shall try to shed some light on this complex, if not confusing, situation; but of course my aspirations must be modest, for there is too much going on to be discussed in a single essay. (It is to be noted that this essay was written during the Bush administration in Washington; early in the second year of the Obama administration there are signs that Federal funding of educational research is being liberalized, more-or-less along the lines argued for in this essay.)

A Preliminary Categorization of the Different Voices About Scientific Educational Research Methodology

I open by giving a crude mapping of the terrain – the lay of the land around Babel – with the reminder that crude maps can be dangerous if they are used for detailed guidance in one’s travels. But it is useful to have a preliminary overview of the landscape, an advanced organizer, before delving more carefully into the details of specific parts. By stressing the crudeness I protect myself from refutation, for crude maps cannot be criticized on the grounds that they have gotten some of the details wrong – if the details were all correct then the map would not be crude!

According to the account I shall use to organize the following discussion, then, there are a number of complex positions about the nature and even the possibility of scientific educational research that are marked by internal debate and sometimes dissension, but which nevertheless can be arranged in a rough and sometimes overlapping way along a continuum from left to right (using these terms in their spatial and not necessarily their political senses). At the left-hand end or pole are clustered a number of positions that differ from each other, but which have in common a skeptical if not a highly negative view of the validity, and hence the value, of social-science inquiry and empirical educational research especially insofar as this research takes inspiration from the model that supposedly can be found in the natural sciences. At the very least, the left-handed positions all reject the so-called “physics envy” of the social sciences and much empirical educational research. To give a precise rendering of the underpinnings of these

left-handed positions would in itself be a mammoth undertaking, which will not be attempted in the present essay. (For fuller discussions see Phillips 2000, 2005a; Phillips and Burbules 2000.)

These positions thus stand in vocal opposition to those located at the right-hand pole, which not only regard rigorous research as possible, but possible to perform in a *scientific* manner; the right-hand pole *has* been struck by “physics envy”, or perhaps by the related disease of “medical research envy”. However, it is important not to stereotype the researchers on the right as mindless positivists, for technically most of them are not positivists (see Phillips 2000, for misreadings of positivism), and some of their arguments have considerable weight; but it also should be noted that they sometimes are their own worst enemy and make occasional intemperate outbursts against modes of research that they regard as lacking in the form of rigor that they themselves prefer – attacks made even more intemperate by the narrow account that they give of the nature of “scientific rigor”, a methodologically-oriented account centered on the use of the randomized controlled experiment or field trial and a few related designs.

Situated in the middle of the continuum are a variety of moderate or temperate positions, including the postpositivism that I personally advocate (Phillips and Burbules 2000); here research is seen as a fallible enterprise that attempts to construct viable warrants or chains of argument that draw upon diverse bodies of evidence and that support any assertions that are being made. (John Dewey speaks of “warranted assertibility”; see Dewey 1938/1966.) As so often happens, the positions in the middle of the range are generally scorned by those at either pole, and are sometimes attacked as being extreme by those on the left who regard any view that is somewhat to the right of their own on the continuum as being extreme.

My chief purpose in the present discussion is to expose the excesses of those at the right, for in the contemporary scene it is those on the right who are shaping the vision of educational research held by in official circles where so many funding decisions are made; then I shall put forward and illustrate a moderate proposal that builds upon the notion of a warranting argument.

The “Left” Pole of the Continuum

At the left-hand end or pole there is a cluster of viewpoints that reject the scientific approach, especially the natural science approach, as a defensible model for educational and other forms of social inquiry. Some philosophers of education in the UK, for example, stress that education is a normative field that is not apt at all for empirical investigation although the reasons why a normative field cannot *also*

be studied empirically have not been made clear; others in this professional group assert that the findings of empirical educational research can only be trivial (Phillips 2005a). Taking quite a different tack, postmodernist and poststructuralist critics of educational research reject the Enlightenment notion of rational inquiry that underlies modern science, and instead stress that within human societies forms of control and power are legitimated by complex discourses – such as the discourse of modern social science – that need to be treated with “incredulity” (Lyotard 1984) and debunked or at least defused largely by case studies that are historical or genealogical in nature. Thus Lather writes of the norms of science as “your father’s paradigm” that those in positions of power as funders and commissioners of research are attempting to impose on the scholarly world; her striking phrase clearly was not intended to be complimentary (Lather 2004). Another recent commentator writes admiringly of Michel Foucault that his work “seeks to uncover not the development of rationality, but the ways new forms of control and power are legitimated by complex discourses which stake a claim to rationality and which are embedded in diverse institutional sites” (Olssen 2004, p. 58).

There are various overlapping positions that are a little nearer the center rather than being located completely at the extreme left-hand pole. One of these is the view held by the Danish social scientist Bent Flyvbjerg; heavily indebted to Foucault, he also stresses that the concept of “power” should be at the center of social science, but crucially he does not see this as spelling the end of empirical social science but rather as pointing the way to a new future, to a *phronetic social science* that is focused on particular contexts and does not aim to discover cross-contextual generalizations in the mode of the natural sciences (Flyvbjerg 2001). In the conclusion to his book he writes that if we wish to “re-enchant and empower social science” we must do three things:

First, we must drop the fruitless efforts to emulate natural science’s success in producing cumulative and predictive theory; this simply does not work in social science. Second, we must take up problems that matter to the local, national, and global communities in which we live, and we must do it in ways that matter; we must focus on issues of values and power like great social scientists have advocated from Aristotle and Machiavelli to Max Weber and Pierre Bourdieu. Finally, we must effectively communicate the results of our research to our fellow citizens.

(Flyvbjerg 2001, p. 166)

Flyvbjerg’s case against the natural science model rests largely upon the contextual nature of human action, but one can concede this without giving up on the ideal or without retreating to a very limited view of the focus of social inquiry; human action certainly is shaped by myriad contextual factors, and these make the finding of broad generalizations extremely difficult but not impossible (for one thing, it depends upon what level of analysis one is

looking at), but furthermore there is *more than* human voluntary action to be studied in social science (for examples, see Phillips 2000). But this is not to disagree that power relations should be a part of the focus in social and educational inquiry – but the part should not be mistaken for the whole.¹

Another position to the left, but more moderate than those at the extremity, is that developed by the philosopher of social science Brian Fay, who writes:

Throughout much of its history the basic question in the philosophy of social science has been: is social science scientific, or can it be? Social scientists have historically sought to claim the mantle of science and have modeled their studies on the natural sciences

However, although this approach yielded important insights into the study of human beings, it no longer grips philosophers or practitioners of social science. Some new approach more in touch with current intellectual and cultural concerns is required. (Fay 1996, p. 1)

The “current concerns” he is referring to are those espoused on the left, not those held by those either in the center or on the right.

A crucial issue that arises when considering the positions that are clustered at the hard left of this pole of my rough continuum is this: What *is* the nature of science, especially in social and educational contexts? Fay sets up a straw man in answer to this question, saying there is only the narrow natural science view, which must be rejected as inappropriate for our purposes. And *in a sense* he is right – it is apparent that if a very narrow view is accepted, one that is based perhaps on an illiberal reading of the methods of physics, then it is reasonable to argue (as he does) that the social sciences and educational research *cannot be like that*. Insofar as this view of science is the enemy, then those who are left of center on the continuum are justified in being appalled. The really crucial point, however, is that those who dismiss scientific educational research as being misguided, as being based on “our father’s paradigm”, have failed to consider carefully enough that there may be *other and more fruitful ways* to characterize this scientific paradigm. A more valid, *postpositivist* account of science is possible, one that is situated in the middle of the continuum (Phillips and Burbules 2000; Phillips 2000); later I shall develop a heretofore neglected aspect of this more moderate way of viewing science.

¹ For other discussions of the context-dependent nature of human action, see Cronbach (1975) who develops the notion of webs of interactive effects that change over time – hence “generalizations decay”, and Labaree (1998) who makes the point that humans can often act so as to contradict any generalization that is made about them – hence researchers must live with a “lesser form of knowledge”. Neither of these authors seem to have held serious doubts that educational research is both possible and useful; instead they hold that it must have modest aspirations.

What has caused the heat in current debates about educational research (what upsets Fay, Flyvbjerg, Lather, and many contributors to the journal symposia referenced earlier) is the fact that there are many at the opposite right-hand pole of the continuum who are pushing a narrow and illiberal view of the nature of science which extols the use of randomized controlled experiments or field trials (RFTs), and whose views are being endorsed by those who are in positions of power and who control the coffers of governmental agency research funds. Most of the remainder of my discussion shall be directed at this other pole, where a narrow reading of the nature of science and its methods are being imposed upon the educational research community.

I will start fairly insularly with the situation in the United States, not because it is more interesting than anywhere else around the globe, but because I am more familiar with it and because much of the sometimes acrimonious debate between individuals and groups at the left and right hand poles of my continuum has taken place in journals that have their home base in that country but which have wide international readership (thus what happens in the USA often influences what happens elsewhere, for good or ill). I will leave the left, and move to the continuum’s center where I will linger briefly before focusing for the remainder of my essay on the currently very influential right-hand pole.

The Center of the Continuum and the NRC Report

Over the past few years much of the debate over the nature of educational research in the USA has been cast in the form of reactions to a report Scientific Research in Education by the National Research Council (NRC), the operating arm of the US National Academies of Sciences (NRC 2002). Analysis of the content of this report shows that it should be located close to the moderate middle of the continuum, but many of its critics from left-handed positions regard it as being at the far right-hand pole.² Careful reading of the report also reveals that it traverses the proverbial razor’s edge – on one hand it does hold, against those on the left, that useful, valid scientific inquiry *is possible* in education; but on the other hand it does suggest that the narrow account of the nature of scientific rigor, given by those on the right in terms of the randomized controlled experiment or field trial and a narrow range of related designs, is quite mistaken.

As mentioned earlier, there have been major, lively symposia on the report in the Educational Researcher (2002), Qualitative Inquiry (2004), Educational Theory (2005), and

² In the spirit of full disclosure the present author must admit to being a member of the Committee that authored this report.

Teachers College Record (2005), where it has been attacked by those on the left who are not able to distinguish friends from foes; and there is an ongoing stream of “stand alone” pieces (for example, Feuer et al. 2002; Eisenhart and Towne 2003; Eisenhart and DeHaan 2005), and the NRC recently has produced a follow-up report (NRC 2005).

This is not the appropriate place to give a detailed history of the political circumstances that led the NRC to establish its Committee to report, *inter alia*, on “What are the principles of scientific quality in education research?” It is sufficient to say that at the time the climate in Washington was (and of course still is) socially and intellectually conservative and marked by skepticism and concern about the poor quality of education research, especially when it was compared with other domains of research that were regarded as rigorous and that therefore helped to frame policy decisions – medical and health-related research were often held up as exemplars that educational research failed to match. The US Congress was on the verge of positioning itself at the far right of the continuum (one of the few times a political elected body has taken a stand on research methodology), by considering restricting research funds in education to scientifically rigorous research, as defined narrowly by the use of randomized experimental or field trial designs – the so-called RFT, the “gold standard” methodology – a step that it has since taken.³ So, at the time, the research community was keen to have an independent group jump the Congressional gun, and offer a less narrow and more reasoned centrist account of what it was to be “rigorously scientific”. Members of the Committee established by the NRC to undertake this task were quite clear among themselves that they were not defining rigorous education research, *simpliciter*, for they recognized explicitly that there was much valuable educational inquiry that fell outside the domain of science; their task, *by charter*, was much more restricted: What are the desiderata for those types of research that purport to be “scientific”, and the findings of which are often taken to offer concrete guidance for policymakers? In addition, it is clear – and it is evident in the final report itself – that the majority of members of the Committee were committed to a view much more liberal than that being canvassed in the Congress, namely, that any reasonable list of scientific principles or desiderata would be such that academically-respectable research fields such as anthropology and ethnography would be included under the mantle of “science”, for of course these would be excluded if this mantle was characterized in terms of the use of the gold standard RFT.

³ Various attempts to legislate about scientific rigor are detailed in Eisenhart and Towne (2003).

It is important to stress that it was not part of the NRC Committee’s charge to question the wisdom of the effort to establish these desiderata, or to criticize the wisdom of the course upon which the Congress appeared to be setting out; nevertheless a number of the critiques of the Committee’s report in the symposia listed above ignored the task that the Committee specifically had been assigned, and criticized it unfairly for not doing what it was not instructed to do – specifically, it was charged with failing to recognize the diversity of methodological approaches to educational research and with promulgating a narrow, positivistic view of the research enterprise.

The strength of the negative reactions becomes hard to comprehend when the key ingredient of the report – the six criteria delineating scientific research in education that the Committee settled upon, formulated as “guiding principles” for a “healthy community” of scientific researchers – are even cursorily examined. They are commonsensical, if not bland, and certainly were far from the extremes of both the poles of opinion that were sketched earlier; they will be presented here in short summary form without nuance or supporting rhetoric (see NRC 2002, pp. 2–6, for the executive summary of these principles, and Chapter 3 for a more extensive presentation). (i) Scientific research should pose significant questions that can be investigated empirically; and the questions and the designs developed to address them should reflect relevant theoretical and methodological understanding; (ii) Research should be linked, explicitly or implicitly, to some overarching theory or conceptual framework; (iii) Methods should be judged in terms of their appropriateness for addressing a specific question; often multiple method designs will be appropriate; (iv) A piece of scientific research will provide a coherent and explicit chain of reasoning – one that addresses limitations and biases, that counters alternative explanations, and that is compelling to the skeptic; (v) Findings should be replicated, and generalized (via new studies) beyond the narrow settings and populations where initially they were carried out; (vi) Research studies should be opened-up to wide professional scrutiny and critique – this strengthens the work and ensures as far as possible its objectivity.

The blandness of these principles should not be mistaken for pointlessness. It can be asked rhetorically: Who would take seriously an inquiry that was not held open to critique, where the argument was confused or not made explicit, that dealt with insignificant issues, that dealt with issues having no possible relation to the real world of education, that used inappropriate methods or techniques, and that ignored relevant theory or generalizations? The fact that the NRC principles engendered hostility in some quarters indicates that indeed there are some in the research community – those largely at the far left of the rough continuum – who apparently espouse these counter-views.

It also should be evident that these six principles do not prohibit the use of qualitative or hermeneutical methods; indeed the report itself makes clear that it was a mistake for researchers in the past to have adopted too-narrow a view of the nature of human action, and it refers in critical tone to the “physics envy” that has often driven research in the human sciences. Nor is there blind advocacy in the report for the use of RFTs – the methodology favored by Congress and the federal Department of Education – although the Committee certainly was supportive of the use of this methodology *in contexts where it was appropriate*. Two members of the Committee recently summarized the report as follows:

From the outset, the committee agreed that... the actual practice of scientific research is more descriptively oriented, more dependent on context, less cumulative, and more intuitive – in other words, more qualitative – than is the idealized model of experimentation, frequently described as the path to producing causal explanations... The committee acknowledged the importance of research outside “science”, including philosophical, historical, and critical scholarship, and its contributions to education as well as to both natural and social science... We also discussed the role of practitioner-oriented research in social science, medicine, and agriculture, as well as education... In the course of our deliberations, we discussed social and cultural context, participant involvement, political considerations, and ethical requirements, considering all of them as inherent features of the study of social and educational phenomena...
(Eisenhart and DeHaan 2005, pp. 3–4)

The fact that six extremely bland principles, set in a context so appreciative of the contributions of so many diverse perspectives and disciplinary orientations, could nevertheless engender such disdain is an indication of the way in which the educational research community has become polarized, and the furor also indicates the deep ambivalence that exists about the label “scientific”. Thus one critic of the report, an avowed postmodernist who has been eager to prick the pretensions about scientific research, still felt the need to express displeasure that her work was excluded by the principles from being regarded as scientific (St. Pierre 2002). Before pursuing this and related matters, however, it is relevant to finish the story of the past few years in the USA, for it turns out – as I hinted above – that the viewpoint of those at the far right of the continuum was victorious, at least in the political struggle for control over Federal research funds.

The Right-Hand “Pole” and the Establishment of the “Gold Standard” for Science

Did the NRC report achieve its goal of liberalizing the account of scientific research in education used by Congress and the research branch of the Federal Department of Education? The answer is a loud and only slightly qualified “no”! Certainly some phrases are used now in official discourse indicating that many approaches are worthwhile,

but the sad fact is that almost all of the Federal discretionary funding for research in the USA still goes to support work that uses the so-called “gold standard” methodology of randomized controlled experimentation. Whether an intervention or treatment was causally responsible for producing a desired effect is taken to be the hallmark of useful, and hence fundable, educational research.

Shortly before the NRC report was published, the conservative Brookings Institution, in Washington, D.C., published a volume titled *Evidence Matters* (Mosteller and Boruch 2002) that canvassed strongly for the use of the randomized controlled experiment or field trial. This is a view that is at the far right of the continuum I discussed earlier – a position that those at the other pole are correct in attacking.⁴ In one typical chapter of this book it was argued that:

Randomized field trials are a sturdy device for generating defensible evidence about relative effectiveness. Nonrandomized trials can do so at times. But the conditions under which they produce the same results as randomized trials depend heavily on assumptions that may or not be plausible and empirically testable. It is then crucial to keep account of whether nonrandomized trials approximate the results of RFTs and to learn why they do or do not.

(Boruch et al. 2002, p. 74)

Here it is clear that the RFT was being used as a “gold standard”; all other designs are to be compared with this standard, although the passage does not consider *all other designs* and only talks of non-randomized field trials. The volume’s editors, Boruch and Mosteller, do have this to say about other designs in their introductory chapter: “Other kinds of research are important *in building up to controlled studies of program effectiveness*” (Boruch and Mosteller 2002, p. 2, emphasis added), which makes clear that other work is only *subsidiary* to the RFT. A few lines later they make a truly remarkable statement – “Even throat-clearing essays at times contribute to understanding” (Boruch and Mosteller 2002, p. 2) – a statement that is remarkably denigratory of the work of theorists, philosophers, social critics, and many others.

It is the general position promulgated in many of the chapters of *Evidence Matters* that won out in Congress, and it is this volume that ought to have been the target of criticism and debate in scholarly symposia rather than the NRC report. The call to “keep account” of how well research approximates the gold standard also seems to have fallen on receptive ears in Washington, for Boruch is now the Principal Investigator of the multi-million dollar Federally-funded project to build a website where educational research studies are evaluated and rated with respect to how trustworthy their conclusions are about program effectiveness – that is, how closely they approximate an ideal RFT (see the What-Works-Clearinghouse at www.W-W-C.org).

⁴ Boruch was also a member of the NRC committee, where not surprisingly he was a strong advocate for the use of RFTs.

This introductory account of the situation in the USA, and of the rise to domination of the narrow and illiberal view of the nature of scientific rigor from the right-hand pole of the continuum, touches upon a number of issues that require further discussion – issues that are not just of localized relevance, but that should be of concern to all of us who are interested in the notion of rigorous research but who are bemused if not offended by the extremely narrow account of scientific rigor that has emerged in official circles but who do not wish to be forced to the other extreme left-hand pole. There is space only to begin a discussion of several of the most vexing of these issues.

Vexing Issues When Looking Right

1. The tendency to associate rigorous or believable or reliable scholarship exclusively with scientific research needs to be resisted strongly. There are many respectable disciplines with well-established canons of rigor – some long antedating empirical research in education – the practitioners of which ought to feel no need to disguise their work as a type of science, and whose work ought not to be dismissed as mere “throat clearing”. Philosophers of education, political theorists, and historians are among those who are capable of producing well-crafted works that present vital and sometimes mind-expanding insights about education that are well supported by arguments and warranting considerations that can withstand critical scrutiny, and that we ignore at our peril. The fact that after several millennia Plato’s “throat clearing” work still offers stimulus to us about the social and intellectual purposes of education, and the hierarchical organization of subjects of instruction, should give us pause and may well lead many to wonder what work from our own day will still be acting as a stimulus in the year 4005.

Several caveats are important. First, it must be remembered that being rigorous is not the same as being correct; there are many rigorous, well-crafted, scholarly pieces of work in educational research, as indeed there are across the natural and social sciences and the humanities, that eventually turn out to be wrong. Second, however, we must not sweep under the carpet the fact that there are some fields (including, I hypothesize, some of those represented at the far left-hand pole of the continuum) that not only have not reached internal agreement about their canons, but where consensus is not even a goal, and where tolerance for all voices is flaunted as a positive virtue. The point of the famous nonsensical paper written in postmodernist jargon by the physicist Alan Sokal was to demonstrate that postmodernism has as yet no established canons by which good work can be distinguished from charlatanism (see the discussion in Phillips 2000).

2. The belief that more rigorous educational research (whether or not carried out via the RFT) is the key to the

formulation of successful educational policies and the alleviation of the problems besetting schooling, is at best charmingly naïve. It is to accept the so-called rational model of decision making as the norm in educational contexts, where arguably it is by far the exception. Political decision makers such as Federal Secretaries of Education or School Board Chairpersons are not irrational, for they pursue their goals quite effectively, and certainly they *make use* of evidence – but often they use it selectively and generally only when it supports a policy or practice that has appeal for them on other political/ideological grounds. Evidence that challenges strongly held and ideologically-supported views is routinely ignored or is subject to “spin doctoring”. Lather reports a nice example; she was aghast when she attended a meeting addressed by US government officials who spoke “about the need for policy research that supported the present administration’s initiatives” (Lather 2004, p. 17). Further examples of this too-common phenomenon are probably unnecessary.

It is not entirely reprehensible that decision makers act in this way, especially in the field of education which is a process that takes place within society and uses massive social resources, and which therefore *ought* to be shaped by the values and suppositions that predominate in a society or which in a democracy are held by those who were duly elected to serve as decision makers. The view that evidence which was produced rigorously will be utterly convincing and determinative of policy because it is “believable” needs to be abandoned – often believability is a function of coherence with our pre-existing value and political commitments, not a function of having been produced by a RFT. It is also worth noting that sometimes if evidence is “believable” but runs counter to the economic or other interests of an interested person or organization, efforts are made to undermine or debunk it (for examples see Michaels 2005).

But there is a further complexifying factor: Different researchers often produce contradictory findings, because they use different data sets to throw light on a problem, or because they decided to use different analytic techniques. This can be taken to show that values and judgment are as much a part of the research process itself as they are with respect to the use of research findings for policy purposes – a fact stressed by many at the left-hand pole of the continuum, who also take this kind of phenomenon as undermining the claim of social science and educational research to be value-neutral and objective.⁵

The most that reasonably can be expected is that educational decisions ought to be *constrained* by the evidence, and

⁵ Lee Shulman recently discussed the different conclusions reached by three different groups of researchers, all highly competent, with respect to the impact of high stakes testing on students in the USA; see Shulman (2005).

that evidence indicating differential harms and benefits ought to be given due weight. This view is strengthened by the philosophical insight that facts or evidence *underdetermine* generalizations; the point is that there are *many* possible policies that can be formulated that are *compatible* with a given body of evidence, indicating that – at best – empirical evidence may be relevant to, but not determinative of, a policy. If we wish to influence the quality of the policies and programs that are promulgated in education, we probably need to pay at least as much attention to values and ideology as we do to experimental design – throat clearing is more efficacious than Boruch and Mosteller imagined.

3. The strong supporters of the gold standard have as an important plank of their position that the RFT is by far and away the most effective, most reliable, way to establish causation – which itself supposes that establishing the causal efficacy of programs or interventions is the main, or most important, purpose of educational research, a matter that will be discussed below.⁶ Certainly the RFT, based as it is on Mill's principles of logic, is an excellent way to establish that X causes Y, and it can be used with profit in many educational research and program evaluation studies. But it is not the *only* way to establish a causal relation, and it is not the *necessary* way. And it is important to remember that establishing X causes Y is not the same thing as establishing *why it does so* (that is, establishing the physical or social mechanism), and it is this latter issue that is often of vital interest in science and in the public policy arena; it also is salutary to remember that the RFT is of little or no value in answering this deeper question about causal mechanisms. The philosopher and social scientist Jon Elster phrases this reminder well:

To cite the cause is not enough: the causal mechanism must also be provided, or at least suggested. In everyday language, in most historical writing and in many social scientific analyses, the mechanism is not explicitly cited. Instead, it is suggested by the way the cause is described.

(Elster 1989, p. 4)

But crucially he adds: “Any given event can be described in many ways” (p. 4), which means that the correct description – given the situation and the researcher's and policy-maker's interests – needs to be the object of further investigation.

Thus, eyewitness testimony about a crime can establish causation, at least to the satisfaction of the law; no RFT is required, and furthermore the eyewitness sometimes sheds light on why the crime was committed. To use a nineteenth-century example, the detailed report of an anthropologist can

establish that if an Australian aboriginal tribal member has a sharpened human bone that is marked with magical signs pointed at him, he will walk into the bush and slowly die; that is, the anthropologist can establish the causal efficacy of bone-pointing, and can also establish that it does not work on individuals of European background. Shirley Brice Heath showed that differences in language use between teachers and culturally-different children in classrooms can result in poor educational performance (Heath 1983); William Harvey established that the pumping of the heart causes the circulation of the blood, an insight he achieved not by conducting randomized field trials but by developing a model of the circulatory system and systematically testing it using hypothetico-deductive reasoning and by doing small scale studies to rule out rival hypotheses; and, using a variety of methods, Tony Bryk and his colleagues were not only able to document differences in attainment between students in Catholic and non-Catholic schools in Chicago, but were able to make a good case about the causal nexus at work (Bryk et al. 1993).

The bone-pointing example is important, too – as is Heath's work – for revealing that causal factors cannot always (or even often) be conceptualized as “interventions” in the mode of a program; bone pointing leads to death because of the cultural beliefs that were held in aboriginal tribes in Australia and which provided many of the values and metaphysical suppositions that gave meaning to the lives of individuals within the tribe. Doing a controlled experiment, with the members of one group assigned to have a bone pointed at them, and the control group members assigned to be free of bone pointing, might if well-done establish the efficacy of the bone pointing but would miss the real point – which is, how on earth did bone pointing produce its dramatic effect? What mechanism, physical or social or both, provides the causal link between bone pointing and death? Documenting the causal efficacy of cultural beliefs is not usually part of the random assigner's credo.

4. Finally, the interrelated views that scientific research is epitomized by the establishing of causation (“program P causes effects E”), and that the establishment of causation is epitomized by randomized experiments or field trials, are based on a serious misreading of the history of the sciences. The natural sciences are taken as *the* epitome by those at the right-hand pole, so looking back at their history with open eyes is liberating; one cannot help but be struck by the huge range of activities engaged in by researchers: establishing what causal factors are operating in a given situation; distinguishing genuine from spurious effects; determining function; determining structure; careful description and delineation of phenomena; accurate measurement; development and testing of theories, hypotheses, and causal models; testing of received wisdom; elucidating unexpected phenomena; production of practically important techniques

⁶ They also argue, not unreasonably, that the RFT allows the making of good estimates of effect size, a matter that will not be pursued here.

and artifacts.⁷ A moment's reflection also reveals that many of these activities have involved mathematical analysis and calculation, deductive and inductive reasoning (and almost certainly abductive reasoning as well), the development of lengthy chains of reasoning, the questioning of premises and the exposing of testable and sometimes untestable assumptions, a willingness to take criticism seriously and also in some cases a willingness to carry on with a line of investigation despite criticisms, and the creative design of ingenious devices and laboratory set-ups and demonstrations. Rene de Reaumur constructing wire gauze containers for food to be placed inside the gut of a hawk (to determine if the food can be digested when protected from mechanical interference by movements of the stomach and intestines), William Harvey blocking a vein in his arm with pressure from a finger, Darwin observing turtles in the Galapagos and breeding pigeons on his farm, Hawking doing calculations, Kinsey and his co-workers administering questionnaires, von Frisch constructing a glass-sided beehive, Galileo rolling a ball down an inclined plane, John Snow locating on the one map the locations of water-wells and also the cases of cholera across London, Crick and Watson tinkering with a crude metal molecular model in the attempt to unravel the structure of DNA – all these are as much a part of science as a modern educational psychologist consulting a table of random numbers to select members of the control and treatment groups for a randomized controlled experiment or field trial.

Even if it were held that some of the activities mentioned above are logically or conceptually “more central” to science than the others – a view the present author remains skeptical about – it would still have to be acknowledged that *without* careful observation, testing, measurement, construction of ingenious apparatus, designing questionnaires, making models, doing calculations, drawing implications, playing hunches, and so forth, scientific inquiry (however characterized) would not be able to get off the ground. A so-called “logic of inquiry” would be sterile unless there also were means for the acquisition of some substance (data, observations, hypotheses). This suggests that attempts to delineate “the central method of science” – the attempt to give a simple “gold standard” account of the “nature of science” – must always be quite arbitrary; perhaps it was recognition of all this that led Percy Bridgman, a Nobel Laureate in Physics, to remark that “the scientist has no other method than doing his damndest” (cited in Kaplan 1964, p. 27).

A Positive, Centrist Suggestion: Replacing Gold by the Platinum Standard

The over-emphasis on using a narrow methodological criterion to delineate “scientific rigor” detracts from the main question at hand when one is assessing the validity or rigor of an inquiry, which is this: *Has the overall case made by the investigator been established to a degree that warrants the tentative acceptance of the theoretical or empirical claims that are being put forward?* For making a case for tentative belief is, in essence, the point of scientific inquiry. William Harvey was making a case about the circulation of the blood; the anthropologist was making a case about the bone-pointing phenomenon; Heath was making a case about the effects of differences in language use; and Bryk and his colleagues were making a case about the effects of certain features of Catholic schooling.

The methodology used in a particular study undoubtedly is an important consideration in case-building, but it is not an “authoritative umpire” (to use Arthur Kaplan’s expression 1964, p. 25) that should rule in or out of play the various diverse considerations that the scientist puts forward in developing his or her case. A weakness here might be compensated for by a strong argument or relevant piece of evidence there, but a methodological purist might exert a negative or at least an unnecessarily restraining influence because some of the relevant considerations might not be mentioned in his or her rulebook. To repeat: What needs to be judged is the overall case that is made – the cohesion and convincingness and rigor of the often-complex argument that the particular scientist is making and is supporting with a diverse body of hopefully relevant evidence. To use John Dewey’s felicitous expression (Dewey 1938/1966), the key point is whether or not a *warrant has been established that justifies the assertion of the claim that is under consideration.*

The attitude towards research being advocated here is that it should be recognized as being an exercise in *argumentation*, which the philosopher Alvin Goldman defines as “a complex speech act in which a speaker presents a thesis to a listener or audience, and defends this thesis with reasons or premises” (Goldman 1994, p. 27; he goes on to spell out several desiderata of good argumentation). Another slightly different way to formulate this position is that research is a *rhetorical* activity in the classic and not the modern sense in which the term almost becomes synonymous with “non-rational persuasion” or “spinning”. As Nelson, Megill and McCloskey put it in the opening chapter of *The Rhetoric of the Human Sciences*,

⁷ Fuller discussion, and examples of each, can be found in Phillips (2005b).

“Rhetoric” covers at once what is communicated, how it is communicated, what happens when it is communicated, how to communicate it better, and what communication is in general. Rhetoric of inquiry enlarges these meanings to encompass the interdependence of inquiry and communication, and to encourage connecting all the skeins of rhetoric into a commitment for better inquiry to inform action.

(Nelson et al. 1987, p. 16)

Although this rhetorical aspect of research is most apparent in the published report, the notion is applicable to day-to-day activity in the lab or in the field or in the library where a case actually is being constructed for later publication that will be convincing to other, often skeptical, members of the relevant research community or to the relevant group of “consumers”. As Wayne Booth and his colleagues put it in their *The Craft of Research*, “In a research report you make a claim, back it with reasons based on evidence, acknowledge and respond to other views, and sometimes explain your principles of reasoning. There’s nothing arcane in any of this. . . .” (Booth et al. 2003, p. 114). There is no disguising the fact that the assessing of a complex piece of rhetoric that purports to warrant a claim can be an extremely difficult task, and it is one that many critics of the quality of education research either abrogate or are incapable of tackling or do not feel inclined to tackle; but assessing the case simply by consulting a text or website on the proper conduct of RFTs simply will not suffice.

Yet a third way of putting all this is that scientific research can be regarded as parallel to the work of a trial lawyer – what is crucial is the way the case is built up, how evidence or arguments are marshaled to fill in the “holes”, how the final argument hangs together including whether it can stand up to the critical scrutiny of peers (trial lawyers working for the other side) and the independent jurors who need to be convinced “beyond all reasonable doubt”. As Stephen Toulmin put it in a classic discussion (1958, reissued in 2003), argumentation is “generalized jurisprudence”:

A sound argument, a well-grounded or firmly-backed claim, is one which will stand up to criticism, one for which a case can be presented coming up to the standard required if it is to deserve a favorable verdict. How many legal terms find a natural extension here! One may even be tempted to say that our extra-legal claims have to be judged . . . before the Court of Reason.

(Toulmin 2003, p. 8)

This parallelism between science and jurisprudence is quite obvious in the scientific/engineering investigation of the cause(s) of the tragic disintegration of the US space shuttle upon re-entry early in 2003, and in the evidentiary trail-blazing that led to the verdict that smoking was the guilty party in the cause of most cases of lung cancer – a verdict now even accepted by cigarette manufacturers. William Harvey constructed a water-tight (at least!) case about the circulation of the blood. And of course Charles Darwin’s groundbreaking work had a masterly rhetorical structure, and it presented a wide variety of evidence and

many different arguments to help make the case for evolution. A fine contemporary example is provided by the work of the young Chicago economist Steven D. Levitt, who in scholarly papers and more popular essays and book chapters has developed convincing cases on such important social issues as the cause of the decline in serious crimes in the United States during the 1990s – cases that do not depend upon evidence obtained from RFTs! Levitt’s contention has been that the decline in serious crime is attributable more to the legalization of abortion than to such factors as the introduction of innovative police practices or the increase in use of the death penalty. Using comparative statistics and other evidence, and with careful argumentation, he undermined the credibility of the many traditional, rival explanations; then he demonstrated that States in the USA, and countries overseas, experienced a decline in serious crime when the first cohort of children born after the liberalization of abortion laws reached their late teen years – and furthermore he found the opposite was true in those places where abortion restrictions had been reintroduced. He produced a strong, clear case, one that stands up well to evaluation in terms of the NRC’s six guiding principles (Levitt and Dubner 2005, chapter 4).

Conclusion

Acceptance of what I have called the platinum standard implies that the gold-standard, based as it is on the *origin* of evidence via the RFT, obscures the fundamental point – namely, that what is *key is how the evidence is used in the course of argumentation*. For “good evidence” can be vitiated by being incorporated into a poor or incomplete argument or case; the thrust of a piece of evidence can be countered by other, differing evidence; the significance of what seems to be a strong piece of evidence can be changed by an appeal to context, or by showing how value judgments skewed the analytic process that produced the evidence, or by construction of a brilliant novel argument that was unforeseen by the purveyors of the evidence, or by pointing to new phenomena that have a bearing on the status of the purported evidence but which were not known at the time this was discovered.⁸

There is nothing in the foregoing discussion to suggest that evidence should be collected in a slipshod way, for how the evidence came to light can (and almost certainly will) become an issue when the case in which it is used faces

⁸ Achinstein (2001) gives a detailed discussion of factors of this sort, and shows that the notion of evidence can be relativized to the epistemic situation of the scientist who accepts it, without destroying the objectivity that is so important in the concept of evidence.

public scrutiny – just as the evidence presented by the prosecution in a criminal trial can become to object of intense scrutiny. The point is, however, to put forward evidence that was not collected by use of the RFT *is not necessarily to be slipshod!* The wise researcher, like the wise prosecutor, will use quality evidence of different kinds, and will weld it all into a coherent case the parts of which strengthen and support each other.

Finally, by turning to platinum we stand a fighting chance to immunize ourselves against what the philosopher of social science Arthur Kaplan once identified as “methodolatry”, a “pervasive trait of American culture” which also may fast becoming a trait of the international educational research community – namely, an “overemphasis on what methodology can achieve” (Kaplan 1964, p. 24). In a sense, by using platinum we replace the narrow practice of methodolatry with the broader practice of intelligent argumentation.

Acknowledgements This chapter is a modified version of *Educational Research Review*, 1 (1) 2006, 15–26.

Note on Contributor

D.C. Phillips is Professor Emeritus of Education and Philosophy at Stanford University. A past-president of the Philosophy of Education Society, he is a member of the U.S. National Academy of Education, and he was a fellow at the Center for Advanced Study in the Behavioral Sciences. His main focus for the past few decades has been philosophical issues arising in the context of educational research. He has authored, co-authored or edited 11 books, and more than 130 journal articles and chapters in books. He was one of the team that produced the NRC report, *Scientific Research in Education*.

References

- Achinstein P (2001) *The book of evidence*. Oxford University Press, Oxford
- Booth W, Colomb G, Williams J (2003) *The craft of research*, 2nd edn. University of Chicago Press, Chicago
- Boruch R, de Moya D, Snyder B (2002) The importance of randomized field trials in education and related areas. In: Mosteller F, Boruch R (eds) *Evidence matters*. Brookings Institution Press, Washington, DC, pp 50–79
- Boruch R, Mosteller F (2002) Overview and new directions. In: Boruch R, Mosteller F (eds) *Evidence matters: randomized trials in educational research*. Brookings Institution, Washington, DC, pp 1–14
- Bryk A, Lee V, Holland P (1993) *Catholic schools and the common good*. Harvard University Press, Cambridge, MA
- Carr D (2003) *Making sense of education*. Routledge-Falmer, London/New York
- Cronbach L (1975) Beyond the two disciplines of scientific psychology. *Am Psychol* 30(2):116–127
- Dewey J (1938/1966) *Logic: the theory of inquiry*. Holt, Rinehart and Winston, New York
- Educational Researcher (2002) Theme issue on. *Sci Res Educ* 31(8):3–29
- Educational Theory (2005) The education science question: a symposium. *Educ Theory* 55(3):235–322
- Eisenhart M, DeHaan R (2005) Doctoral preparation of scientifically based education researchers. *Educational Res* 34(4):3–13
- Eisenhart M, Towne L (2003) Contestation and change in national policy on ‘scientifically based’ education research. *Educational Res* 32(7):31–38
- Elster J (1989) *Nuts and bolts for the social sciences*. Cambridge University Press, Cambridge, UK
- Fay B (1996) *Contemporary philosophy of social science: a multicultural approach*. Blackwell, Oxford
- Feuer M, Towne L, Shavelson R (2002) Scientific culture and educational research. *Educational Res* 31(8):4–14
- Flyvbjerg B (2001) *Making social science matter*. Cambridge University Press, Cambridge
- Goldman A (1994) Argumentation and social epistemology. *J Philos* 91(1):27–49
- Hargreaves D (1997) In defence of research for evidence-based teaching. *Brit Educ Res J* 23(4):405–419
- Heath SB (1983) *Ways with words: language, life and work in communities and classrooms*. Cambridge University Press, New York
- Kaplan A (1964) *The conduct of inquiry*. Chandler, Scranton
- Kuhn T (1970) *The structure of scientific revolutions*. University of Chicago Press, Chicago
- Labaree D (1998) Educational researchers: living with a lesser form of knowledge. *Educational Res* 27(8):4–12
- Lather P (2004) This IS your father’s paradigm: government intrusion and the case of qualitative research in education. *Qual Inq* 10(1):15–34
- Levitt S, Dubner S (2005) *Freakonomics*. William Morrow, New York
- Lyotard J-F (1984) *The postmodern condition: a report on knowledge*. Manchester University Press, Manchester
- Michaels D (2005) Doubt is their product. *Sci Am* 292(6):96–101
- Mosteller F, Boruch R (eds) (2002) *Evidence matters*. Brookings Institution Press, Washington, DC
- National Research Council (2002) *Scientific research in education*. National Academies Press, Washington, DC
- National Research Council (2005) *Advancing scientific research in education*. National Academies Press, Washington, DC
- Nelson J, Megill A, McCloskey D (eds) (1987) *The rhetoric of the human sciences*. University of Wisconsin Press, Madison
- Olsen M (2004) The school as the microscope of conduction: doing Foucauldian research in education. In: Marshall J (ed) *Poststructuralism, philosophy, pedagogy*. Kluwer, Dordrecht, pp 57–84
- Phillips D (2000) *The expanded social scientist’s bestiary*. Rowman and Littlefield, Lanham
- Phillips D (2005a) The contested nature of empirical educational research (and why philosophy of education offers little help). *J Philos Educ* 39(4):1–21
- Phillips D (2005b) Muddying the waters: the many purposes of educational inquiry. In: Conrad C, Serlin R (eds) *SAGE handbook for research in education: engaging ideas and enriching inquiry*. Sage, Thousand Oaks, pp 7–21
- Phillips D, Burbules N (2000) *Postpositivism and educational research*. Rowman and Littlefield, Lanham
- Qualitative Inquiry (2004) Symposium on scientific educational research. *Qual Inq* 10(1):5–129
- Shulman L (2005) Seek simplicity . . . and distrust it. *Educ Week* 24(39):36–48
- St. Pierre E (2002) “Science” rejects postmodernism. *Educational Res* 31(8):25–27
- Teachers College Record (2005) A symposium on the implications of the scientific research in education report for qualitative inquiry. *Teach Coll Rec* 107(1):1–58
- Toulmin S (2003) *The uses of argument*. Cambridge University Press, Cambridge

Perplexing Times in Educational Research and the Prospects for a New Platinum Standard

17

Jānis Ozoliņš

Abstract

D.C. Phillips argues for a platinum standard for educational research and though it is a step in the right the right direction, the disparate voices in educational research make it difficult to see its implementation. Moreover, what might sink the adoption of such a standard is the Deweyan pragmatism that Phillips espouses, since it seems to lead to relativism and a denial that disparate methods might provide different perspectives on the one truth. The view that scientific or quantitative research methods are somehow more objective depends very largely on what is meant by the term “objective”. The statistical methods which are seen as providing an objective assessment of an educational problem are not devoid of subjective choices and in many cases are a blunt instrument. Qualitative methods have their place, and educational researchers need to find ways in which practitioners using different research methodologies can work collaboratively.

Keywords

Educational research • Quantitative methods • Qualitative research • Deweyan pragmatism • Scientific method

Denis Phillips reflects on recent discourse about empirical educational research focussing in particular on arguing against the view that the best form of educational research is empirical research utilising randomised field trials. Essentially, what Phillips is concerned with is the continuing debate amongst educational researchers about whether quantitative methods are better than qualitative methods of research because the former methods are held by an influential body of researchers to be closer to scientific method. This debate in the United States has centred largely around a report by the National Research Council (NRC) entitled *Scientific Research in Education* and spawned a quite extensive literature that argues both for and against the

recommendations of the report, in a number of cases, quite unfairly. Discussion of the nature of educational research, however, spreads more widely than the United States and is also a hot topic elsewhere. (See, for example, Lingard and Gale (2010), Koro-Ljungberg et al. (2009), Wright (2008), Biesta (2007), Carr (2007), Moss (2005), Feuer et al. (2002), St. Pierre (2002), who are only a tiny sample.)

Phillips seeks to debunk the idea that quantitative methods, such as randomised field trials, represent scientific methods as practised in the exact or physical sciences (p. 133). On any interpretation of the logic of discovery, quantitative experimentation is only one element of the way in which science is done. This means that any attempt to emulate the physical sciences in educational research, where this is reduced to the use of quantitative methods alone is unlikely to be successful. Moreover, there is substantial evidence that this is the case. Phillips argues for the adoption of a “platinum standard” of research which does not canonize one particular method, but proposes that we should be prepared to use a variety of methods within a broader

J. Ozoliņš (✉)
Faculty of Theology and Philosophy, School of Philosophy,
Australian Catholic University, Melbourne, VIC, Australia

Institute of Philosophy and Sociology,
University of Latvia, Riga, Latvia
e-mail: John.Ozolins@acu.edu.au

practice of intelligent argumentation. Phillips's moderate proposal is undoubtedly attractive, as far as it goes, for he urges us to adopt a position between the extremes of a rabid postmodernism and nihilistic, unreflective rejection of science and a polar opposite scientific view which sees scientific method, as used in the physical sciences, as the only way in which reliable results about problems in education can be researched. It is hard to see how one can disagree with Phillips's moderate stance and reasonableness, but it may be that it is a too seductively moderate position and perhaps his temperate seeking of a middle ground concedes too much and fails to see the real problems with both polar opposites and what passes for educational research in general. If both poles are flawed, the middle might not be a better place to be.

Phillips likens the wide variety of different educational research methods to the tower of Babel. Like the Tower of Babel, where there was a confusion of tongues, in educational research there is such a confusion of methods and contexts that educational researchers are often unable to communicate with each other. Moreover, he says, this means that there is a plethora of opinions and obscure ideologies which lead to research findings which are of dubious worth (p. 130). This, however, is across the spectrum of methods and not just at the two poles that Phillips mentions.

Phillips is therefore less forthright than he could be about the insidious rise of obscurantism and uncritical use of philosophical and theoretical concepts without any apprehension of what these concepts mean. It is not only what he calls the left pole that is guilty of this, however. Both poles are guilty of using dimly understood concepts as foundations for their educational research labours. A critical analysis of an educational issue, for example, in the hands of an educational theorist adept at jargon, becomes a "Foucauldian deconstruction of the power structures in educational institutions legitimating complex discourses that maintain oppressive relations between teacher and learner". Ironically, one can turn the tables on such postmodern discourse by viewing such pompous and opaque utterances with incredulity, since there is no reason to accept their points of view any more than it is to accept the positions that they decry. It is not only those with a postmodern bent for jargon who are guilty of such abuses, however, since at the other extreme, the inappropriate use of quantitative methods in the guise of providing an objective analysis of an educational problem is just as much a difficulty. Perhaps surprisingly, Phillips does not spend very much time criticising the left pole, though of course, he does have a certain conception of scientific research and hence, educational research in his sights.

Phillips asserts that the use of quantitative methods can lead to a false belief that the conclusions that can be drawn provide an objective assessment of a particular educational situation (pp. 135–6). This is undoubtedly so for a number of reasons which he does not specify, but we can quickly

adumbrate. The rigour of mathematics creates the illusion that what is described in numerical terms is devoid of personal bias; numbers are absolute. Unfortunately, a table of values hides a multitude of assumptions and assertions that are not always overtly described. Secondly, quantitative methods make no distinctions between individuals, so there is the illusion that whether or not a researcher likes or dislikes particular participants has no bearing on the statistical analysis that is carried out. (This may not be overt, but a researcher could choose a particular population consistently because it provides a good response rate.) Thirdly, the biases of the participants themselves can be easily ignored, since it is not their individual views that matter, but what is aggregated. Mathematics as a scientific tool is a way of representing the world and insofar as it is a human representation, does not provide a God's eye view.

The question of what is meant by "objective" is quite problematic, as Phillips intimates, because a key assumption is that quantitative methods provide an objective analysis, held by the advocates of quantitative methods, to be missing in qualitative analyses. One of the criteria put forward as indicating a level of objectivity about the results obtained is that they are able to be replicated, just as any good science experiment is supposed to be able to be. There are many reasons why a complex experiment involving human participants is not likely to be replicable. These will include the inability to be able to specify, let alone control, the many variables which might be involved in an experiment involving human beings. In addition, in the repeat of an experiment, they will not be the same human beings nor in the same situation. In order to get some kind of replication, most of the features which might make a particular case interesting would need to be removed, otherwise no general conclusions applicable across a population can be made. Differences are glossed in order to get a general picture and in some cases what is gained in generality can be misleading or even false. Secondly, objectivity can be understood in a number of ways and it is possible to fall into the trap of mistaking what statistics describe as corresponding to reality. Finally, mathematics and statistics also involve a measure of art, since it is the researcher who must decide how to determine a random representative sample of the population whose data is to be collected. This is a quite sophisticated process and it is quite possible for final results to differ wildly as a result of different data sets being used.

The serious flaw in Phillips's position is the adoption of Deweyan pragmatism. This exposes him to the same kind of accusation of relativism that is levelled at the postmodernist. Though the provisional nature of scientific theory suggests that the best we can ever hope for is a theory which is warranted by the evidence, this does not mean that the aim of science is not the uncovering of truth. The quest for new and better scientific theories occurs because human beings

are never satisfied just with what works or with what is warranted, but continue to probe what they think is an objective reality of which science can at the very least get a glimpse. Phillips is right, however, to point out that the scientific method is far from monolithic and there is plenty of evidence to be drawn from the history of science to show that in many cases, successful scientists have stuck to their theories even when the empirical evidence flatly contradicted the theory. It is doubtful, however, whether this was due to some acceptance of a postmodern rejection of a normative conception of reason and evidence, but more likely to be because of sheer bloody-mindedness. Einstein, for example, could never bring himself to accept Quantum Mechanics and the theory of relativity and Quantum Mechanics remain unreconciled to this day (Randall 2005). Science as it is practised by scientists bears little, if any, resemblance to educational research, and though Phillips's appeal to the logic of discovery as pointing to a variety of approaches to scientific problems, is inviting, these are more sociological and psychological than epistemological. Insofar as they are sociological and psychological, they will resemble what happens in educational research, but they are very different when it comes to the subject matter that they seek to illuminate. Human beings are not indistinguishable from one another in the way in which molecules, atoms, protons and electrons are and so cannot be treated in the same way.

Educational research is not scientific research of the kind being undertaken in the exact sciences and though there are points at which one can disagree with Phillips, he is right to suggest that the gold standard is not enough. Though an improvement, whether a platinum standard is good enough is also questionable, because as Phillips points out in his metaphor of the Tower of Babel, there is a wide variety of educational research methods which simply do not speak to one another. A first step might be to try to find a way to unify these disparate methods so that they are no longer failing to speak to each other.

Note on Contributor

Jānis (John) Tāivaldis Ozoliņš FHERDSA is Professor of Philosophy and Foundation Head of the School of Philosophy in the Faculty of Theology and Philosophy at the Australian Catholic University. He is a permanent Honorary Fellow of the Institute of Philosophy and Sociology, University of Latvia and was Inaugural Crawford Miller Visiting Fellow at St. Cross College, Oxford in 2007. He has also been a Visiting Researcher at the University of Exeter. He is editor of *Ethics Education*, a journal for applied philosophy and ethics in the Christian tradition and an Associate Editor of *Educational Philosophy and Theory*.

References

- Biesta G (2007) Why 'what works' won't work: evidence-based practice and the democratic deficit in educational research. *Educ Theor* 57(4):1–22
- Carr D (2007) Moralized psychology or psychologized morality? Ethics and psychology in recent theorizing about moral and character education. *Educ Theor* 57(4):389–402
- Feuer MJ, Towne L, Shavelson RJ (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Koro-Ljungberg M, Yendol-Hoppey D, Jude Smith J, Hayes SB (2009) (E)piistemological awareness, instantiation of methods, and uninformed methodological ambiguity in qualitative research projects. *Educ Res* 38(9):687–699
- Lingard B, Gale T (2010) Defining educational research: a perspective of/on presidential addresses and the Australian Association for Research in Education. *Aust Educ Res* 37(1):21–49
- Moss PA (2005) Understanding the other/understanding ourselves: toward a constructive dialogue about "principles" in educational research. *Educ Theor* 55(3):263–283
- Randall L (2005) The world's biggest ideas: theory of everything. *New Sci* 187(2517):34–35
- St. Pierre EA (2002) Comment: 'science' rejects postmodernism. *Educ Res* 31(8):25–27
- Wright J (2008) Reframing quality and impact: the place of theory in education research. *Aust Educ Res* 35(1):1–16

Darrell P. Rowbottom

Abstract

What makes educational research scientific? And should we be worried whether it is? This chapter approaches these questions from a philosophical perspective, while also introducing some relevant work from twentieth-century philosophy of science. It discusses scientific method, confirmation, the distinction between theory and observation, the aim of science, and the relative merits of qualitative and quantitative approaches.

Keywords

Educational research • Philosophy of science • Scientific method • Research methods • Qualitative vs Quantitative

Introduction

What makes educational research scientific? And should we be worried whether it is? This chapter approaches these questions from a philosophical perspective, while also introducing some relevant work from twentieth-century philosophy of science. It takes it for granted that these questions are important for a variety of practical reasons, especially policy-related ones, particularly those related to the report of the National Research Council of the United States (*Scientific Research in Education* 2002).¹ Accounts of scientific method and science found in textbooks on educational research are also likely to have an impact on the practice of young researchers. So when those accounts are confused and erroneous – e.g. in popular textbooks such as Cohen, Manion and Morrison (2003), as demonstrated in Rowbottom and Aiston (2006) – this can have dire consequences.

The best place to start, perhaps, is to look at how we use words like ‘science’, ‘scientist’ and ‘scientific’ in everyday discourse; and the main reason to do this is to prevent any confusion about the subject matter of this chapter. What I want to suggest is that there are two senses in which these words are currently used: one taxonomical, and the other normative. In the first sense, we would all be happy to refer to physics, chemistry and biology as sciences. But in the second, some might suggest that work in a specific area of contemporary biology (such as natural history) is not nearly as good as that in physics (e.g., on a topic we will come to later, due to its qualitative nature) and therefore that it is less (or even un-) scientific. Another example is as follows. A faculty member of a department of physics is clearly a scientist in a taxonomical sense, in virtue of her membership of a particular community. But she may nevertheless adopt all kinds of practices, such as intentionally falsifying data or ignoring any evidence that tells against one of her pet theories, which make her unscientific according to many normative theories of science.

No doubt these two senses are not entirely unrelated. In particular, our present taxonomy may be a result of previous normative accounts. One might suggest, for instance, that natural philosophy became natural science in the Enlightenment period, because of a special method (or approach) which was adopted (and has been retained)

¹ For an illustration of how these questions are relevant with respect to government funding of research, see Rowbottom and Aiston (2011).

D.P. Rowbottom (✉)
Department of Philosophy, Lingnan University, Tuen Mun, Hong Kong
e-mail: darrellrowbottom@ln.edu.hk

by its practitioners.² And while this once popular view is highly implausible – if one looks, for instance, at the developments in optics in the early Islamic world and the sophistication of Ancient Greek astronomy³ – it nevertheless remains convincing that ‘science’ has acquired its current taxonomical sense partly as a result of the struggles between natural philosophers and theologians in medieval universities.⁴

Whatever the truth of this matter, however, problems clearly arise when the two senses are conflated. This happens when the press describe bad research (or even pseudo-science) simply as scientific. (And if one insists on using ‘scientific’ only in a normative sense, one should insist that such research should not be so described!) It sometimes happens too, rather unfortunately, when scientists (in the taxonomical sense) are called as expert witnesses, or the work of those in some areas of the humanities is dismissed as incorrect or irrelevant simply because it is (taxonomically) non-scientific.

This enables us to identify one clear way in which we should be interested whether educational research is scientific (and/or in making educational research scientific): to understand whether it counts (and/or how to make it count) as a genuine and/or good form of inquiry. But notice that when we put the matter this way, we may similarly be interested in whether logic, mathematics or metaphysics are scientific. And this does violence to our intuitions because the disciplines that count as ‘scientific’ in a taxonomical sense, nowadays, typically have an empirical dimension.

What we don’t want to do, of course, is end up arguing over a word. We can leave ‘science’ to refer only to (genuine and/or good) forms of inquiry which *happen to have an empirical dimension* if we like – as many philosophers of science have – but in doing so we must be careful not to dismiss the possibility of (genuine and/or good) forms of inquiry which are non-empirical. Similarly, we should not assume that empirical inquiry is possible without non-empirical inquiry (or assumptions which can only be legitimately examined, if at all, by non-empirical means). We should bear in mind the possibility that educational research has non-empirical aspects or components.

In what follows, I will be particularly concerned with dispelling widespread misconceptions concerning science –

or what might be known as folk conceptions of science – and will use several examples from physics (supported where appropriate by educational analogues) in order to do so. The motivation behind discussing physics is that this is usually taken to be the Queen of the Sciences, or the ‘hard’ science *par excellence*. So by showing that it is not nearly as ‘hard’ as is often thought, I hope that I will help to trim unrealistic expectations for educational research.

Empirical Testability

As noted above, science is usually taken to involve empirical research. And one simple view of scientific theories – inspired perhaps by cursory readings of Popper’s philosophy of science⁵ – is that they must be testable and/or falsifiable by (sense) experience.⁶ From this it might be thought that one can determine whether some hypothesis or law is scientific simply by looking at whether it conflicts with any possible observation statement.

One problem with this view is that there are many scientific theories and laws which cannot be tested in isolation. As Duhem (1954, p. 183) put it (writing specifically of physics): ‘an experiment. . . can never condemn an isolated hypothesis but only a whole theoretical group. . . [so] a “crucial experiment” is impossible’. Consider Newton’s 1st Law of Motion: “A body remains at constant velocity (or rest) unless a resultant force is acting on it.” Taken alone, this provides no predictions whatsoever and therefore cannot be refuted by experience. It does not, for instance, tell us what kinds of forces there are. So when something accelerates unexpectedly, this may suggest only that there is some invisible force at work that we were previously unaware of (and a dogmatist intent on defending Newton’s 1st Law at all costs can always appeal to such forces).

A simple educational analogue may help. Imagine I want to test the hypothesis that a group of pupils is better behaved when they are aware that they are being observed, and conduct this test by using hidden cameras. There doesn’t appear to be any significant change in behaviour when a teacher is physically present, according to my data, so I conclude that awareness of observation isn’t correlated with better behaviour. But it is possible that the students found out about the hidden cameras and that the initial hypothesis is true. In short, the auxiliary hypothesis here would be: ‘The children did not know that they *were* actually

² There has been a considerable debate about the extent to which there is continuity over this period. See, for example, McMullin (1965) and Grant (1996).

³ See Lindberg (1992) on optics in the Islamic world, and Kuhn (1957) on Ancient Greek astronomy.

⁴ For more on Medieval science and the struggles between theologians and natural philosophers, see Grant (1996) and Lindberg (1992).

⁵ For my own view on Popper’s philosophy of science, see Rowbottom and Aiston (2006) and Rowbottom (2011a).

⁶ ‘Experience’ is a much more slippery term than is often recognised. Arguably, for example, to have an intuition (or to imagine or conceive of something) is to have a sort of experience.

being observed when the teacher was not present'. And note that this can't be tested in isolation either, of course. We could ask the children, and take them at their word. But they we'd be assuming that they were telling the truth. We could check by using a lie detector, but then we'd be assuming that the lie detector was reliable. And so forth.

The discovery of Neptune by Leverrier provides a beautiful historical illustration of Duhem's thesis.⁷ Using Newtonian Mechanics (NM) – all Newton's Laws of Motion, along with his Law of Gravitation (and related mathematics) – it was possible to predict the orbit of Uranus. But in order to apply NM in such a way – to bring the theory into contact with experience – further auxiliary assumptions (AA) were required: about how many other planets are in the solar system, what their respective masses are, and so forth. So when it was ascertained that the prediction was wrong, it was possible to go two ways. On the one hand, one could reject NM. On the other, one could reject AA. (And from a logical point of view, one could reject both; we should also not forget that our observations are fallible, so it's always possible to want to check these.)

In this scenario, the reaction of Leverrier – who was highly confident that NM was true – was to think about possible ways in which AA might have been false. In particular, he asked "Given NM and the actual orbit of Uranus, what else would have to be the case?" In this way, he was able to predict the existence (and path) of the previously unknown Neptune.⁸

The story does not end there, however, because Leverrier subsequently tried to pull off the same trick again, in order to explain the aberrant orbit of Mercury! (Specifically, he wanted to explain the precession of the perihelion; or put more simply, why the shape of the orbit changes in the way it does. See Fig. 18.1.) This time he predicted the existence of a planet which he called Vulcan. But Vulcan does not exist, and in fact the orbit of Mercury can be predicted by relativity theory without positing any new planets (or other massive bodies). In this case, that is to say, NM was eventually taken to be at fault.

This story is significant, for our purposes, in several respects. First, it suggests that there is no 'Golden Rule' which uniquely determines what we should do when we experience a conflict between theory and observation (even in physics). Even if we take it that our observations are generally reliable, this does not mean that they are complete. (And this matter is complicated even more, as we will later see, by the fact that most observation statements used in

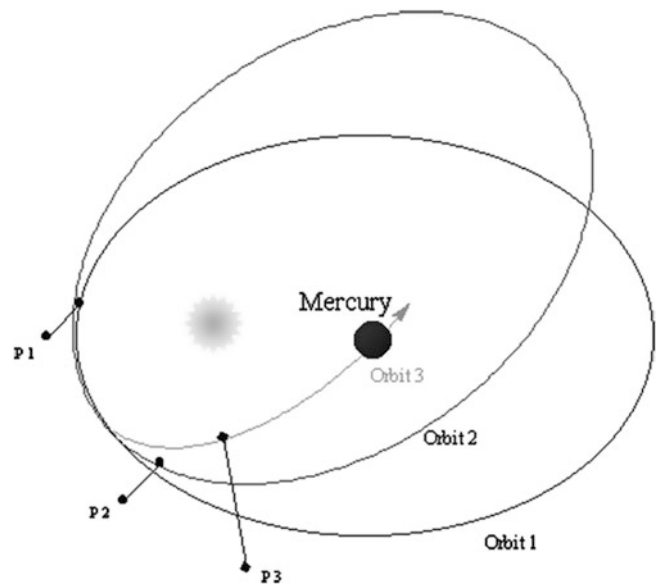


Fig. 18.1 Illustration of the precession of the perihelion of Mercury

science are theory-laden.) This recognition, taken alone, is already enough to raise serious doubts about the prospect of a 'scientific method' that can unerringly lead us to, or towards, the truth (in an absolute sense).

We will address so-called 'scientific method' again a little later, so here I will focus on a second way in which the prior example is significant: sometimes the development of new and interesting theories depends on the examination of hypotheses (or laws) which do not, taken alone, have any empirical consequences. And we should be careful not to dismiss such work summarily; for it may, after all, play a vital role in future science.

Popper (1959, p. 83) suggests that we should never introduce *ad hoc* hypotheses, e.g. auxiliaries designed merely to defend theories from (empirical) falsification: 'As regards *auxiliary hypotheses*. . . only those are acceptable whose introduction does not diminish the degree of falsifiability or testability of the system in question'.⁹ But even if this is correct, it still leaves plenty of room for manoeuvre in any scenario in which theory fails to be consistent with experience. What's more, some might even be suspicious of Popper's recommendation. Why should it be, after all, that the more testable of two options will prove to be the better? Maybe some presently untestable theories (when conjoined with the auxiliary hypotheses that we *currently* have at our disposal) are nonetheless true. Maybe some theories that will never be testable by

⁷ For a more detailed account than that which follows, see Hanson (1962). The discussion below is based on the one that appears in Rowbottom and Aiston (2011).

⁸ Neptune had been seen before by Galileo. But he mistook it for a star.

⁹ Popper (1959, p. 83) subsequently concedes that this cannot be correct for some auxiliary hypotheses, in particular "*singular* statements. . . [e.g.] the assumption that a certain observation or measurement which cannot be repeated may have been due to error." For further discussion, with reference to historical episodes where 'ad hoc' hypotheses have been advanced, see Rowbottom (2011b).

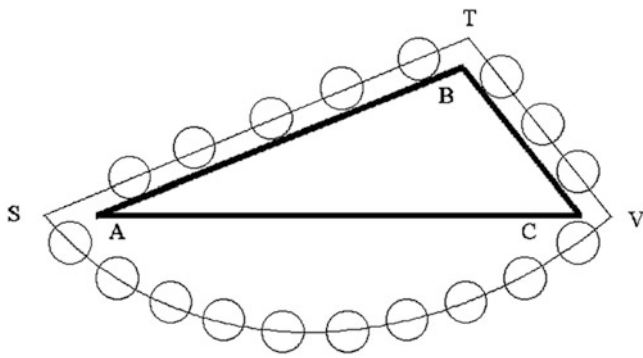


Fig. 18.2 Stevinus's thought experiment

sense experience are true. One ought not to *presuppose* empiricism – roughly, that all knowledge is based on experience – in advancing a counterargument to this claim. For this, after all, is one of the theses implicitly in question.

On a related note, the significance of thought experiments in science – both historically and in the present day – is often missed. Mach (1960[1893]) provides a number of examples in mechanics, of which the following is one of the most striking. It concerns a contemporary of Galileo's, namely Simon Stevinus, who derived the Principle of the Inclined Plane by considering a string of balls (which we may, following Mach, think of as a uniform chain) draped over a triangular prism.¹⁰

Stevinus's reasoning was simple but brilliant. First, it is intuitively clear that the chain will remain stationary, rather than move (Fig. 18.2). Second, it is clear that the lower portion of the chain (between S and V) is symmetrical, and therefore pulls the remainder of the chain (between S and T and T and V) equally clockwise and anti-clockwise. Now we need only imagine cutting the chain at S and V, and can see that the remainder of the chain will remain stationary. 'Hence: on inclined planes of equal heights equal weights act in the inverse proportion of the lengths of the planes' (Mach 1960[1893], p. 34). We have our principle of mechanics, but got there in a way that involved no physical experiments, and is perhaps not even empirical.¹¹ So if we can do this in mechanics, then why not in educational research? It is hard to see how to answer.

In closing this section, it should be added that areas of inquiry which are plausibly non-empirical, e.g. pure mathematics, also issue in findings which appear to be crucial for the progress of science. Sometimes, mathematical techniques or notions are developed which appear to be quite useless, although they subsequently become the stuff of fundamental scientific theories. (Complex numbers are

¹⁰ Galileo's fundamental breakthrough in mechanics was derived from a thought-experiment too! See Gendler (1998).

¹¹ For more on thought experiments, see Brown (1991), Norton (1996), and Gendler (2000).

used in the symbolic generalizations of quantum mechanics, for example.) This is not to deny the possibility that empiricism in the philosophy of mathematics will win out in time, of course; it is simply hard to see if it will.¹²

Theories and Observations

Another salient possibility is that a discipline is rendered scientific by its reliance on observations (and derivative observation statements) because these are somehow more 'secure' than their theoretical counterparts. It is unclear, however, that theories and observations are always – or even *ever* – quite so distinct as some seem to suppose. Duhem (1954, p. 145) provides the following example from physics:

Go into the laboratory; draw near this table crowded with so much apparatus: an electric battery, copper wire wrapped in silk, vessels filled with mercury, coils, a small iron bar carrying a mirror. An observer plunges the metallic stem of a rod, mounted with rubber, into small holes; the iron oscillates and, by means of the mirror tied to it, sends a beam of light over to a celluloid ruler, and the observer follows the movement of the light beam on it. . . . Ask him now what he is doing. Is he going to answer: "I am studying the oscillations of the piece of iron carrying this mirror?" No, he will tell you that he is measuring the electrical resistance of a coil. If you are astonished and ask him what meaning these words have, and what relation they have to the phenomena he has perceived and which you have at the same time perceived, he will reply that your question would require some very long explanations, and he will recommend that you take a course in electricity.

Duhem nevertheless appears to believe that there are basic phenomena, which correspond to sense impressions. Russell (1912, p. 19), for instance, explains the matter as follows:

When I look at my table and see a certain brown colour, what is quite certain at once is not '*I* am seeing a brown colour', but rather 'a brown colour is being seen'. . . . [I]t is our particular thoughts and feelings that have primitive certainty. . . . Here, therefore, we have, for what it is worth, a solid basis from which to begin our pursuit of knowledge.

However, Russell's key move from 'primitive certainty' to 'a solid basis for the pursuit of knowledge' constitutes a critical – yet all-too-common – philosophical error.¹³ This is

¹² See, for example, Lakatos (1976) and Bueno (2000).

¹³ It should be added that there is no primitive certainty in the example that Russell gives, either. Keuth (2005, p.100) explains this nicely:

Let us now assume that when I say "This area now looks red," I mean only that it appears red *to me* here and now. Have I thus finally eliminated *any* transcendence inherent in my description? By using the predicate "red," I presuppose that my present colour impression equals the impressions that I have had on other occasions when I have used the same word. Hence I try to use it *according to a rule*. However, I do not now have the other impressions; rather, I only remember them. Accordingly, I still assert more than I sense here and now.



Fig. 18.3 The duck-rabbit

because p does not follow from ‘I cannot doubt that p ’. So even if it is true that I cannot doubt ‘a brown colour is being seen’, this does not demonstrate that ‘a brown colour is being seen’. Worse, I may doubt many things tomorrow that I do not doubt today (so the proper scope of ‘cannot’ is unclear). And this is not even to mention that ‘seen’ looks rather like a theoretical notion (as reflection on the difference between ‘seen’ and ‘imagined’ appears to suggest).

We do not have the space to go into the subtleties of Duhem’s and Russell’s views here (although we will encounter Mach’s view, which is rather close to Duhem’s in key respects, in the next section). Instead, we should simply note that the previous considerations may lead us to consider the possibility, advanced by Kuhn (1996, p. 85), that: ‘Scientists do not see something *as* something else; instead, they simply see it.’ Kuhn discusses this matter by drawing an analogy with Gestalt switches in perception, such as those in Figs. 18.3, 18.4, and 18.5.

Kuhn’s analogy is not ideal for his purposes. Consider the Necker Cube, above, which we can interpret as representing one of two cubes. We are inclined to think, nevertheless, that what we’re *really* seeing is just a collection of lines on the page. Only if we think to a level beyond that, however, will we fully grasp Kuhn’s (1996, p. 144) suggestion:

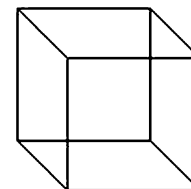
The subject of a gestalt demonstration knows that his perception has shifted because he can make it shift back and forth repeatedly while he holds the same book or piece of paper in his hands. Aware that nothing in his environment has changed, he directs his attention increasingly not to the figure (duck or rabbit) but to the lines on the paper he is looking at. Ultimately he may even learn to see those lines without seeing either of the figures, and he may then say (what he could not legitimately have said earlier) that it is these lines that he really sees but that he sees them alternately *as* a duck and *as* a rabbit... With scientific observation, however, the situation is exactly reversed. The scientist can have no recourse above or beyond what he sees with his eyes and instruments.

In fact, rather strikingly, Kuhn (1996, p. 111) even appears to suggest, at one point, that two individuals with different theoretical frameworks may actually inhabit different worlds:



Fig. 18.4 The two women

Fig. 18.5 The necker cube



[D]uring revolutions scientists see new and different things when looking with familiar instruments in places they have looked before... we may want to say that after a revolution scientists are responding to a different world... What were ducks... before the revolution are rabbits afterwards...

This may be a bit far-fetched, in so far as it is perfectly respectable to think that there are some aspects of our (sensory) experience that are non-conceptual. But to tackle this matter in any serious depth is far beyond the scope of the present chapter. So let us simply note what *is* reasonably clear: no contemporary science, be it natural or social, could get off the ground without theory-infected statements operating as observation (i.e. ‘basic’) statements. It is only on the basis of such theory-infected statements, indeed, that (some of) the theories which allow us to make them can be challenged.¹⁴

Confirmation and Scientific Method

We have already seen that a simple falsificationist view of science cannot be quite right, at least in so far as it involves the idea that we can conclusively falsify theories by adopting

¹⁴ See Franklin et al. (1989) and Brown (1993).

a particular method, because of Duhem's thesis and the fallibility of observations. (The fact that observations are theory-laden, if it is a fact, complicates matters even more. Note, however, that this is not to say that we should not propose bold theories, but be willing to give them up and test them to the best of our ability; this is the kind of methodological falsificationism which Popper is best understood as advocating.¹⁵) Yet one might nevertheless think that it is possible to proceed in such a way as to arrive at well-confirmed theories (and therefore that educational research should take this route). In fact, however, this view is even more problematic than that of the (simple) falsificationist.

In order to show this, let's imagine that Duhem's thesis is false – that we can derive observation statements directly from theories – and that we (know that we) have an infallible source of true observation statements. (If desired, imagine also that observations are not theory-laden.) Now conclusive falsification would be possible. For example, 'There is a black bunny' could be conclusively verified, and therefore 'All bunnies are brown' could be conclusively falsified. But would we be able to *confirm* general theories such as 'All bunnies are brown'? Rowbottom (2010b).

Let's imagine that we take some theory, T_1 , from which it is possible to derive an infinite number of observational consequences and derive a finite number of those consequences:

$$T_1 \vdash O_1, T_1 \vdash O_2, T_1 \vdash O_3, \dots, T_1 \vdash O_n$$

(For those unfamiliar with logical notation, ' \vdash ' denotes an entailment relation. So ' $T_1 \vdash O_1$ ' means theory one entails observation statement one.)

Let's then imagine that we check whether these observation statements are true, and discover that they all are:

$$O_1, O_2, O_3, \dots, O_n$$

Have we now confirmed T_1 ? And if n were very large, e.g. one million, wouldn't we be irrational to fail to believe in T_1 ? Not if we recognise that there are other theories, e.g. T_2 , which predict all the same evidence:

$$T_2 \vdash O_1, T_2 \vdash O_2, T_2 \vdash O_3, \dots, T_2 \vdash O_n$$

$$T_3 \vdash O_1, T_3 \vdash O_2, T_3 \vdash O_3, \dots, T_3 \vdash O_n$$

...

In order to see this, let T_1 be 'All bunnies are brown', T_2 be 'All wild bunnies are brown', and T_3 be 'All twenty-first-

century bunnies are brown'.¹⁶ Now let all the observations (incidentally) concern wild twenty-first-century brown bunnies. The problem ought to be clear. And note that we can also think of theories like '99.99999999 % of bunnies are brown', and so forth.

In fact, inferring that a theory is true on the basis of a true prediction appears to be similar to committing a simple fallacy of reasoning: that of affirming the consequent. An example of this is "If it rained here recently, there would be puddles on the road. There are puddles on the road. Therefore, it has rained here recently." The simple point is that puddles of water can appear by other means, such as a burst water main or melting snow. Similarly, one cannot infer that one is a good teacher simply because one's students perform better than the average (in the school, say). The better than average performance is consistent with other theories (e.g. the students are unusually bright and/or dedicated).

In the face of this recognition, one might suggest that theories such as T_1 , T_2 , and T_3 should be chosen between on non-empirical grounds, on the basis of factors such as simplicity and explanatory power. We tend to do this in daily life. If I unexpectedly found a full bottle of milk on my doorstep in the morning, for instance, I would likely prefer the theory that a milkman delivered it by mistake than the theory that a secret admirer left it as a gift!

However, it is at best unclear what such a strategy can achieve. We can all agree that simplicity and explanatory power are important *pragmatic* virtues for theories; that they make them easier to grasp and to use. But why should we take these virtues to be truth-conducive? Is the simplest and neatest theory which is compatible with any given observations always the true (or most truth-like) theory? Is it even the true (or most truth-like) theory more often than not? It complicates matters even more if we note that sometimes the theory which is explanatorily best may not be the most simple, and *vice versa*. But it is hard to see how there is any fact of the matter about how we should weight these theoretical virtues (with an eye to truth).¹⁷

The Aim of Science

The previous discussion has taken it for granted, perhaps incorrectly, that the aim of science (and therefore educational research if it is a science) is to discover *the truth*, in some sort of everyday correspondence (to reality) sense.

¹⁵ See Boland (1994), Rowbottom and Aiston (2006), and Rowbottom (2011a).

¹⁶ It is important to realise that 'All' should be taken to range, as it does in many genuine scientific theories, across all space-time. We do not, for example, take quantum mechanics to hold only in our solar system between 2000 B.C. and 2100 A.D.

¹⁷ This issue is also discussed in the final section of Rowbottom (2008).

However, several philosophers of science have either understood ‘truth’ rather differently, or suggested that the aim of science is only to discover *a particular class of true propositions* (e.g. those that pertain to observable things).

Before discussing this in any further depth, however, it is important to be clear about ‘the aim of science’. What this means, roughly, is the limit of what we can expect research in science to achieve in principle. Take pinball as a case in point. The aim of the game is to amass as high a score as possible, although one might play simply because one enjoys the experience, or to distract oneself from some troubling thoughts. So the aim of a discipline does not depend on what its practitioners think, believe, or aspire to (except in exceptional cases, for example, where these thoughts, beliefs, or aspirations are themselves the objects of study).¹⁸ As van Fraassen 1980, p. 8) puts it:

The aim of the game of chess is to checkmate your opponent; but the motive for playing the game may be fame, gold, and glory. What the aim is determines what counts as success in the enterprise as such; and this aim may be pursued for any number of reasons.

The views that philosophers and scientists have taken on the aim of science have therefore been influenced by their (implicit or explicit) epistemological stances. For Mach (1960[1893], p. 579), for instance, so-called ‘physical objects’ are *really* just bundles of sensations:

Properly speaking the world is not composed of “things” as its elements, but of colors, tones, pressures, spaces, times, in short what we ordinarily call individual sensations.

(Mach 1960[1893], p. 579)

There is literally nothing beyond the appearances to investigate, hence the aim of science must be: ‘to replace, or *save*, experiences, by the reproduction and anticipation of facts in thought’ (Mach 1960[1893], p. 577). In short, a scientific theory serves as an *instrument* for prediction (or retrodiction), in so far as it enables one to isolate general patterns of interaction between impressions. Talk of ‘electrons’ and ‘cells’ is therefore figurative, even if it turns out to be indispensable. Such an instrumentalist in the realm of educational research might think that talk of ‘concepts’ is equally as figurative, despite being useful in course design and pedagogical theory.¹⁹

A more recent alternative to this instrumentalist view is that we should take discourse about unobservable things

literally, but can legitimately suspend judgement about what unobservable things there really are. Any story which saves the phenomena (i.e. accounts for the way that observable things behave), whether true or false, is equally as good from this constructive empiricist perspective (which is defended by van Fraassen 1980). In short, a theory doesn’t have to be true when it comes to what it says about the unobservable, in order for it to be successful. The aim of science is empirical adequacy; to arrive at theories which correctly describe how observable things behave and interact.

In the context of educational research in particular, one might think that the aim of the enterprise is simply to save the educational phenomena (or find empirically adequate educational theories); and that this is possible either (A) without invoking psychological factors (such as individual mental states) at all, or (B) without taking talk of psychological factors literally, or (C) without caring whether one’s theories based on such psychological factors are true (even if they should be understood literally). As an instrumentalist, one might, for example, take (improvement in) examination performance to be the key measure of educational success; and one might be concerned purely with how various factors influence this. One could take contemporary psychology with a pinch of salt, to the extent that one used it at all. One could accept it for heuristic and/or explanatory purposes while taking the entities it discusses (e.g. mental states and minds) to be little more than theoretical constructs, or simply accept theories positing such entities without caring whether they turn out to be true (rather than predictively accurate when it comes to understanding how teaching practice relates to student examination performance).

Note that talking only in terms of examination performance is not nearly as ridiculous as it may initially appear, especially when the question of which examinations we should be interested in is left open.²⁰ One might suggest that an individual should acquire particular *dispositions* from being well-educated (in some particular area). And one can look for those dispositions, by putting the individual in suitable scenarios, without worrying about minds, psychological states, concepts, beliefs, sense impressions, and so on. Notice furthermore that those who *do* talk in terms of things such as concepts also require ways to identify these. And what alternatives, other than examinations (in one form or another) do they really have?²¹ At stake is the autonomy of (some aspects of) educational research. Is it reducible to psychology, in principle if not in practice?

¹⁸ It should be noted that to say there is a single aim is not to rule out ‘subsidiary aims which may or may not be means to that end’ (van Fraassen 1980, p. 8). For further discussion of the notion of ‘the aim of science’ see Rowbottom (2010a).

¹⁹ Instrumentalism is presently an unpopular position among philosophers of science, but see Rowbottom (2011b) for an articulation and defence of a novel version.

²⁰ And to leave this question open need not be to concede that it must be answered by appeal to psychology (say).

²¹ For related criticisms of contemporary work on so-called ‘threshold concepts’, see Rowbottom (2007).

On a related methodological note, one might suggest that there is a basic distinction, which has considerable methodological significance, between phenomenological and fundamental laws. Compare “All iron bars expand when heated” with Newton’s aforementioned 1st Law of Motion (“A body remains at constant velocity (or rest) unless a resultant force is acting on it”). The former is phenomenological; it is linked with everyday experience. The latter clearly has greater scope than the former, in so far as it pertains to all bodies (and therefore atoms in an iron bar), and so we might expect to be able to explain “All iron bars expand when heated” by appeal to this and other such fundamental laws (such as those involving the interactions of the atoms within iron bars, and so forth).²² In fact in physics, in the words of Cartwright (1983, p. 100):

A long tradition distinguishes fundamental from phenomenological laws, and favors the fundamental. Fundamental laws are true in themselves; phenomenological laws hold only on account of more fundamental ones. This view embodies an extreme realism about the fundamental laws of basic explanatory theories. Not only are they true (or would be if we had the right ones), but they are, in a sense, more true than the phenomenological laws that they explain.

Roughly, Cartwright’s view is that this is backwards; that the phenomenological laws are the real ones. The lesson to take away is that two quite different modelling approaches are possible: (a) a ‘bottom-up’ strategy which starts from (alleged) fundamental laws and tries to derive phenomenological ones, and (b) a ‘top-down’ strategy which focuses on phenomenological laws, and tries to save them by whatever means possible. “Which approach is best?” may not have a contextually invariant answer.

Qualitative Versus Quantitative Approaches

Returning to the topic of mathematics, we might now take a brief look at an area of controversy in contemporary social science; the relative merits of so-called ‘qualitative’ and so-called ‘quantitative’ research methods, which are discussed in an array of textbooks on educational research.²³

There is somewhat of a false opposition, here. Generally, one cannot fruitfully apply mathematics without making qualitative distinctions. Even in performing a simple task like counting the blades of grass on my lawn, I will require some sort of means – albeit perhaps an implicit one – of determining what counts as a blade of grass (e.g. biological convention), what counts as in being my garden (e.g. whether grass growing through the cracks in the patio is eligible), and

so forth. Similarly, in gathering statistics, one has to make decisions about what sort of data is, and is not, relevant to the problem that one wishes to solve (or question that one wishes to answer). In trying to determine whether smoking causes cancer by statistical means, we will surely want to consider how many of our sample also drink heavily, have worked with (or had considerable exposure to) asbestos, and so forth. But we do not, without some sort of theoretical reason to expect an appropriate causal link, concern ourselves with political preference or marital status. Nonetheless, it is far from logically impossible that marriage is a cause of cancer!

It is entirely implausible, moreover, that adopting a mathematical approach will help one to understand the concerns of a specific individual, e.g. in an interview situation. And in fact, designing questions purely so that they are amenable to statistical analysis may serve to obscure (or even prevent receipt of) significant information which might emerge if a less regimented approach were adopted. (Indeed, isn’t this the reason that many feedback forms which ask for one to five ratings on a variety of criteria, e.g. at hotels, conclude with a box for “Any other comments”?)

On the other hand, it is easy to express qualitative differences in mathematical terms; e.g. one could let some variable z represent ‘male’ if it takes a value of zero and ‘female’ if it takes a value of unity, and then consider average z values in different populations for biological purposes.²⁴ It is also easy to present mathematical data in visual formats that make it easy to understand. And there are some scenarios where patterns would be very difficult to spot, and/or enough indicative data would not be possible to gather, without using mathematics (or gathering data amenable to mathematical analysis).

The correct view therefore appears to be that mathematics is incredibly useful in some contexts despite being unnecessary (and even unhelpful) in others. One simply has to look at the *specific* problem one is trying to solve. (And arguably it is always the problem that should come first. One limits oneself, that is to say, by deciding to adopt some particular approach and then looking around to see what one can legitimately do with it.) In this regard, this is an area where there has been much ado about nothing; which approach is better is a function of context. As Popper (1983, p. 7) put it:

The doctrine that there is as much science in a subject as there is mathematics in it, or as much as there is measurement or ‘precision’ in it, rests upon a complete misunderstanding. On the contrary, the following maxim holds for all sciences: Never aim at more precision than is required by the problem at hand.

²² See also Carnap (1994), chapters 23 and 24.

²³ Examples are Burrell and Morgan (1979) and Cohen et al. (2003). For a critical study of the latter, see Rowbottom and Aiston (2006).

²⁴ For more on this, see Okasha’s (2006, section 1.2) discussion of Price’s equation.

Conclusion

Work in the so-called ‘Queen of the Sciences’, namely physics, is nowhere near as clean and tidy as is sometimes claimed. Some might think that social scientific research is even more messy, and I have not argued to the contrary, but I should voice my own view that it is not. Systems in natural science such as can be just as complex as their social counterparts, and idealisations (like frictionless planes and rational actors) are unavoidable in order to generate predictive models. Moreover, there are many physical situations in which attempting to observe some system will disrupt it (such that the system post-disruption is all that will be seen). But you will have to take my word for that. My plea is for us to look at natural science as it really is, warts and all, before judging how social science measures up.

Note on Contributor

Darrell Rowbottom is Professor, Department of Philosophy, Lingnan University, Hong Kong, and Associate Editor, Australasian Journal of Philosophy. Prior to his appointment at Lingnan, he was a British Academy Postdoctoral Fellow at the University of Oxford. His expertise is in philosophy of science, epistemology, philosophy of probability, and metaphysics. He has derivative educational interests, especially concerning research methods and research training.

References

- Boland L (1994) Scientific thinking without scientific method: two views of popper. In: Backhouse R (ed) *New directions in economic methodology*. Routledge, London, pp 154–172
- Brown JR (1991) *Laboratory of the mind: thought experiments in the natural sciences*. Routledge, London
- Brown HI (1993) A theory-laden observation *can* test the theory. *Brit J Philos Sci* 44(3):555–559
- Bueno O (2000) Empiricism, scientific change and mathematical change. *Stud Hist Philos Sci* 31(2):269–296
- Burrell G, Morgan G (1979) *Sociological paradigms and organisational analysis*. Heinemann Educational Books, London
- Carnap R (1994) *An introduction to the philosophy of science*. Dover, New York
- Cartwright N (1983) *How the laws of physics lie*. Oxford University Press, Oxford
- Cohen L, Manion L, Morrison K (2003) *Research methods in education*, 6th edn. RoutledgeFalmer, London
- Duhem PMM (1954) *The aim and structure of physical theory* (trans: Weiner PP). Princeton University Press, Princeton
- Franklin A, Anderson M, Brock D, Coleman S, Downing J, Gruvander A, Lilly J, Neal J, Peterson D, Price M, Rice R, Smith L, Speirer S, Toering D (1989) Can a theory-laden observation test the theory? *Brit J Philos Sci* 40(2):229–231
- Gendler TS (1998) Galileo and the indispensability of scientific thought experiment. *Brit J Philos Sci* 49(3):397–424
- Gendler TS (2000) *Thought experiment: on the powers and limits of imaginary cases*. Garland Press, New York
- Grant E (1996) *The foundations of modern science in the middle ages: their religious, institutional, and intellectual contexts*. Cambridge University Press, Cambridge
- Hanson NR (1962) Leverrier: the zenith and nadir of Newtonian mechanics. *Isis* 53(3):359–378
- Keuth H (2005) *The philosophy of Karl Popper*. Cambridge University Press, Cambridge
- Kuhn TS (1957) *The Copernican revolution: planetary astronomy in the development of western thought*. Harvard University Press, Cambridge
- Kuhn TS (1996) *The structure of scientific revolutions*, 3rd edn. University of Chicago Press, Chicago
- Lakatos I (1976) A renaissance of empiricism in the recent philosophy of mathematics. *Brit J Philos Sci* 27(3):201–223
- Lindberg DC (1992) *The beginnings of western science: the European scientific tradition in philosophical, religious, and institutional context, 600 B.C. to A.D. 1450*. University of Chicago Press, Chicago
- Mach E (1960[1893]) *The science of mechanics*, 6th edn. Open Court, La Salle
- McMullin E (1965) Medieval and modern science: continuity or discontinuity? *Int Philos Quart* 5:103–129
- National Research Council (2002) *Scientific research in education*. National Academy Press, Washington, DC
- Norton J (1996) Are thought experiments just what you always thought? *Can J Philos* 26(3):333–366
- Okasha S (2006) *Evolution and the levels of selection*. Oxford University Press, Oxford
- Popper KR (1959) *The logic of scientific discovery*. Basic Books, New York
- Popper KR (1983) *Realism and the aim of science*. Routledge, London
- Rowbottom DP (2007) Demystifying threshold concepts. *J Philos Educ* 41(2):263–270
- Rowbottom DP (2008) Intersubjective corroboration. *Stud Hist Philos Sci* 39(1):124–132
- Rowbottom DP (2010a) Evolutionary epistemology and the aim of science. *Aust J Philos* 88(2):209–225
- Rowbottom DP (2010b) Corroboration and auxiliary hypotheses: Duhem’s thesis revisited. *Synthese* 177(1):139–149
- Rowbottom DP (2011a) Popper’s critical rationalism: a philosophical investigation. Routledge, London
- Rowbottom DP (2011b) The instrumentalist’s new clothes. *Philos Sci* 78:1200–1211
- Rowbottom DP, Aiston SJ (2006) The myth of “scientific method” in contemporary educational research. *J Philos Educ* 40(2):137–156
- Rowbottom DP, Aiston SJ (2011) The use and misuse of taxpayers’ money: publicly-funded educational research. *Brit Educ Res J* 37(4):631–655
- Russell B (1912) *The problems of philosophy*. Oxford University Press, Oxford
- van Fraassen BC (1980) *The scientific image*. Oxford University Press, Oxford

Richard Smith

Abstract

The demand for educational research to be ‘scientific’ is as misguided as the requirement for social scientists to resemble physical scientists in their methods and has the same roots. Social scientists are so called mainly because, following the Era of Scientific Revolutions around the beginning of the seventeenth century and the Enlightenment, the idea took root that ‘science’ was the most powerful and respectable kind of knowledge. The same historical movements have led to ‘science’ and its derivatives having high standing as terms of rhetoric. Texts describing educational research in scientific terms are often no more than rhetorical, and here I analyse an exemplary document from the European Science Foundation in order to reveal its rhetorical status and the distortions this effects in our understanding of education and educational research.

KeywordsRhetoric • Social science • Empiricism • Competencies • *Geisteswissenschaften*

Perhaps one of the less fortunate accidents in the history of thought is the one by which the social sciences came to be so named. The story is well-known. What we now call the Era of Scientific Revolutions in the late sixteenth and early seventeenth centuries, associated with such names as Galileo, Harvey, Boyle and Vesalius, produced a vast number of inventions and discoveries that improved the human condition (or at any rate, the condition of Europeans). New instruments such as microscopes and telescopes facilitated the investigation of the living world and made for more efficient and safer travel. Improved treatments for a range of diseases were developed. New elements were detected and uses for them found. It seemed to some that it might even be possible to formulate a general method for discovering new knowledge (see Smith 2006) such that any competent person could be ‘guided at every step, and the business be done as if by machinery’. So wrote Francis Bacon in the *Novum Organum*, which translates roughly as

the *New Handbook of Method*, first published in 1620. Descartes had the same aspiration: his *Discourse* (1637) is, in its full title, *Discourse on the Method of Rightly Conducting One’s Reason and of Seeking Truth in the Sciences* (. . . *et chercher la vérité dans les sciences*, in its original French title). The success of the way of working responsible for the discoveries and inventions of the time – involving laboratories, test-tubes and so on – was impressive, and as it slowly lost its old name of ‘natural philosophy’ and acquired that of ‘science’ over the course of the nineteenth century, the idea took root that science was the best and most respectable kind of knowledge.

The prestige of science is such that the word has been tacked on to almost every discipline at one time or another: books have appeared claiming to speak of Political Science, the Science of History, and even the Science of Literary Criticism. Cambridge University taught a Tripos in ‘Moral Sciences’ for over a century, replacing it with a Philosophy Tripos only in 1970. There is some justification for this promiscuous use of the word in that the Latin word *scientia* from which it is derived was most commonly used in Renaissance Europe to mean ‘systematic knowledge of the true

R. Smith (✉)
School of Education, Durham University, Durham, UK
e-mail: r.d.smith@durham.ac.uk

causes of particular things' (Smith 1997, p. 16): clearly we might hope for such knowledge in history and politics, though hardly in literary criticism or moral philosophy. A lot of the time the word 'science' is used simply to suggest that politics, history and so on are just as important and no less to be taken seriously than physics or chemistry, or that ways of organising society are self-evidently good because they are 'scientific'. In the same way advertisements regularly declare this or that product to be 'scientifically proven' to kill 99 % of all known germs, or display white-coated 'scientists' testing – successfully, of course – the efficacy of the shampoo, chewing gum, or toilet cleaner being promoted.

In short, the word 'science' and its derivatives have rhetorical force, and for a great deal of the time they are used rhetorically, that is to persuade by the suggestive power of words rather than by rational argument. Academic writing is not immune to rhetoric, and the claims of educational research to scientific status are frequently infected by it. These claims can be questioned from the standpoint of the philosophy of science, as Rowbottom does so devastatingly. But, I shall show, analysis of the rhetoric of 'science' in this field can also be very revealing. In what follows I analyse a particular example: a recent (2009) Position Paper, *Vital Questions: The Contribution of European Social Science*, prepared by the Standing Committee for the Social Sciences under the aegis of the European Science Foundation, and one section of it especially. Let me be clear from the start that I am making no accusation of deliberate or underhand sophistry. It is rather that the rhetoric of 'science' is so pervasive in our time that it can seduce the writer as well as his or her readers.

Vital Questions describes, and functions as an advocate for, 'the current state and future prospects of the social sciences in Europe' (p. 3). In the Introduction (*ibid.*) we read:

As this volume shows, social scientists are contending with the analysis and understanding of many complex problems. They are often using vast data-bases and statistical techniques which rival, in their volume and in the demands that they make for computing resources, the needs of other scientists. (p. 3)

The next two sentences acknowledge that social scientists also 'struggle' with philosophical and ethical issues (or perhaps this is less acknowledgement than confession: no databases and statistics here, clearly) and that they engage with social and political theory, but then we read:

Europe's social scientists look forward to working even more closely with scientists in other fields, to exploit recent advances in understanding of the human genome, the workings of the brain and the complex systems which characterise so many biological systems. (*sic*) (*ibid.*)

'Scientists in other fields' is ambiguous. It can be read (with a pause after 'scientists') to indicate a difference

between social scientists and physical scientists, or with an emphasis on *other* to emphasise that the only difference is in the 'field'. The sentence seems to direct us to the second reading.

In a later section titled 'Challenges facing the educational system', Manfred Prenzel asks what social scientists can contribute to the development of education and to educational research. We should pause to note that the idea of 'system' in his title is significant here. Its scientific flavour was established by the Introduction of *Vital Questions*, where (in the quotation immediately above) social scientists were depicted as looking forward to working not just on systems, but on the systems which characterise systems. Of course the phrase 'educational system' is in any case heavily metaphorical, the more literal use of the word being in the context of sewage systems or the braking system of a car, the province of mechanics or technicians if not scientists. At any rate, social scientists are already producing 'evaluation models which allow reliable measurements of advanced competencies', 'reliable and valid indicators for lesson and school quality', 'sophisticated procedures which make economical sample designs and analyses of background conditions possible at different aggregation levels' (p. 30). Social science, in other words, has been busy copying the physical sciences: modelling, measuring and establishing procedures, that is methods, and of course, systems. The future lies in more of the same, but with an even stronger lean towards the empiricism that Rowbottom (Chap. 18, this volume) notes is usually entailed by any pretension to 'science'. It is a lamentable fact, Prenzel thinks, that educational research is much less well funded than medical research, and often provides little more than 'descriptive knowledge' (p. 33). Our chief need accordingly is for

Studies providing knowledge of effective measures to achieve specific aims under given conditions in an educational system. In order to obtain this type of technological knowledge, systematic experiments in the laboratory and in the field are necessary... (p. 33)

It is fascinating to note, first, the rather airy assumption that 'an educational system' lends itself to 'given conditions': the immense degree of variability from one school lesson to another, for instance, suggests rather that a degree of caution is in order here. Secondly, 'knowledge' turns in the space of two sentences into 'technological knowledge' and then to knowledge that requires 'systematic experiments' (those systems again, now coupled with experiments – 'systematic ones', naturally – that can of course only be empirical) 'in the laboratory'. We start with the need for knowledge, and end up in the laboratory. We might also conduct these experiments 'in the field': this seems to cast educational researchers as empirical anthropologists or sociologists doing their 'field work'. But these seldom conduct 'systematic experiments'

on their subjects, both for ethical reasons and because ‘given conditions’ (above) are virtually impossible to replicate. The term ‘field’ again seems only to work rhetorically, reassuring the reader that these researchers are willing to get their empirical hands dirty in the ‘real world’.

Something similar seems to lurk behind the use of the word ‘competencies’ here, as so often these days, to label every kind of skill, ability, capacity and quality. Reading and writing are ‘key competencies’ (p. 30), and so are mathematical and scientific literacy (*ibid.*: some irony here, perhaps: would we not expect scientific literacy to exclude rhetoric?). Then there are ‘basic competencies’ which appear to include ‘the basic ways of thinking and working in a discipline’ (p. 32). Presumably if the disciplines are mathematics or science then they are key basic competencies. There are also competencies on the basis of which ‘countries, regions or even individual schools have different degrees of success in detecting and promoting talents’. No doubt these are advanced competencies. But the potential to become a doctor or an atomic physicist hardly expresses itself as any kind of competence: rather as insight, accuracy, mastery of detail, ease with abstract ideas. Many problems flow from treating all these as competencies, not least the assumption that they can be tested relatively easily, measure and compared. Talk of ‘competencies’, as of ‘skills’, makes itself at home here not because it is true to the nature of human beings and their varied qualities but because it has a reassuringly down-to-earth, practical sound to it.

I want to make clear that nothing in what I have written above means I am against science. As a well-known example has it, the prospect of life in a world without modern dentistry does not appeal. My lap-top is a thing of beauty and wonder to me as well as enabling me to write this paragraph on the almost equally impressive Swedish train on which I am travelling. Particle physics (as far as I can understand it) and the mapping of the genome are extraordinary and fascinating as well as promising benefits to humankind. Like Rowbottom, however, I am sceptical about whether there is any one ‘scientific method’ behind such discoveries and developments such that it can and ought to be rolled out into the social sciences, and sceptical too about assumptions that ever more refined forms of empiricism are the royal road to progress in the growth of knowledge and understanding. It is scientism, not science, that is the problem: the idea that science is automatically superior to all other kinds of knowledge, which only command respect insofar as they attain to the methods of the physical sciences.

This is all the odder since in the German tradition, from which Prenzel writes, it has been common, following Wilhelm Dilthey, to refer to what in English are called the social sciences as the *Geisteswissenschaften*. This term means, roughly, ‘ways of understanding the human spirit’

(*Geist*); Dilthey used it precisely to register the differences between the approaches to knowledge characteristic of investigations of human behaviour and institutions and approaches characteristic of the natural sciences (*Naturwissenschaften*).

It would be natural to wonder if there are simply problems of translation here. In the German tradition *wissenschaften*, which is commonly rendered in English as ‘sciences’, tends to be used to label every kind of systematic approach to the generation of knowledge, i.e. research, and its transmission, i.e. teaching. This usage is true to the Renaissance idea of *scientia* (see above) and in that sense it arguably does not have to carry with it the associations of the natural or physical sciences. Yet, as we have seen, Prenzel’s rhetoric, with its appeal to databases, statistics, genomes and the workings of the brain, and its constant figuring of ‘systems’, all the time prescind from what one might call the innocent, Germanic sense of *wissenschaft*/science in favour of the Anglophone sense in which physics and chemistry and laboratories and experiments form the paradigm.

The neglect of the distinctive conception of the *Geisteswissenschaften* is unfortunate because out of it there emerged an emphasis on understanding the meaning (*verstehen*) of human behaviour as opposed to seeking an explanation (*erklärung*) of it. This distinction is extremely important in what we call the social sciences, and we often find ourselves in intellectual trouble if we forget it. It may be helpful to take an extended example that involves education in its broader dimension. The northeast of England has one of the highest young teenage pregnancy rates in the EU. Of course in one sense we know perfectly well why young women, some as young as 12 or 13, become pregnant. The cause, seen from an *erklärung*, bio-medical perspective, is not a mystery. But to know this is not the same as to understand why these girls often conceive deliberately or at least non-accidentally, and why they often choose to let the pregnancy run its course and bring up their babies themselves. We – we researchers – do not easily understand the *meaning* of their behaviour. Are they for example irresponsible and careless, or under the impression that pregnancy will put them at the top of the council house waiting list? Or are they in contrast doing the most responsible thing that they will ever do, bring up a child, in a life that is not likely to give them many opportunities to find meaning and status? The dominance of the bio-medical perspective is reflected in the widespread assumption that such young mothers simply don’t understand about conception and contraception, an assumption that careful interviewing in fact quickly disproves. Nevertheless local authorities, Primary Care Trusts (administrative divisions of the UK’s National Health Service) and schools mount ever more impressive programmes to inform schoolchildren about the physical

'facts of life'. However the young teenage pregnancy rate barely changes, suggesting that the focus on biological explanation is indeed misplaced.

To understand the meaning of these girls' patterns of behaviour involves carefully and respectfully exploring the issue with them, bearing in mind that they themselves will not necessarily have a great deal of insight into the matter; it involves acquiring some understanding of the culture of their towns and villages and the way they have themselves been brought up. It turns out, for instance, that they were themselves often born to very young mothers. This is a long way from scientific knowledge. The conclusions researchers arrive at are likely to be tentative and provisional rather than definitive, and it is important that the girls have the chance to shape them with their own reflections in turn. The very process here may well have an important influence on their understanding of themselves and their world and on their future patterns of behaviour. All of this is very different from the scientific examination of physical matter and from scientific explanation.

In the face of the ever-increasing expectation that social scientists should copy the methods of physical scientists it is necessary continually to recall and insist on the importance of this *verstehen* element of social science. It may not command the sort of research funds that the construction of vast databases does, nor the prestige that attaches to brain-imaging or the mapping of the human genome. It is however essential and unavoidable if we hope to understand the meaning of complex phenomena such as growing up and education.

While writing this article I was reminded of a hymn which we sang in my school assemblies in the early 1960s. It began:

These things shall be! A loftier race/Than e'er the world hath
known shall rise/With flame of freedom in their souls/And light
of science in their eyes.

The insistence on 'science' is all the more striking because the poem, *A Vista*, from which the hymn is taken, by John Addington Symonds (1840–93), talks not of 'science' but of 'knowledge'. It is a remarkable elision, and it is the same one that we have noticed occurring throughout the

text I have analysed. The second verse, common to the poem and the hymn, is also instructive:

They shall be gentle, brave, and strong/To spill no drop of blood,
but dare/All that may plant man's lordship firm/On earth and
fire, and sea, and air.

The scientific ideal here is clear: a new breed of men, clear-eyed in their enlightenment, and committed to domination of the elements. The Enlightenment legacy, with its commitment to rationality and what we now call science, is one we would not wish to live without. But the rhetorical use of science as a metaphor distorts our understanding of human beings and their world, including the world of education.

Acknowledgement I am grateful to Alan Reid for his helpful suggestions and comments on this chapter.

Note on Contributor

Richard Smith is Professor of Education at the University of Durham, UK, where he was for many years Director of the Combined Degrees in Arts and Social Sciences. He is Editor of the new journal *Ethics and Education* and Associate Editor of the *Journal of Philosophy of Education*. His most recent authored book is (with Paul Smeyers and Paul Standish) *The Therapy of Education* (2006). His principal research interests are in the philosophy of education and the philosophy of social science. He is currently writing (with Paul Smeyers) a book on the philosophy of educational research.

References

- European Science Foundation Standing Committee for the Social Sciences (2009) Vital questions: the contribution of European Social Science. http://www.esf.org/fileadmin/links/Social/Publications/SCSSpositionPaper_2009-11.pdf. Accessed 1 July 2010
- Smith R (1997) *The Norton history of the human sciences*. W.W. Norton, London
- Smith R (2006) As if by machinery: the levelling of educational research. Philosophy, methodology and educational research, special issue. *J Philos Educ* 40(2):157–168

Educational Research as Science? A Critical Question

20

Sarah Aiston

Abstract

‘Educational research as science?’ is a question that has been the subject of much heated debate. This short article aims to consider some of the key ideas we might invoke when attempting to conceive of educational research as science and in turn demonstrate that by considering the philosophy of science, and in particular Rowbottom’s piece, we can broaden our understanding of what counts as ‘scientific’ research.

Keywords

Science • Quality • Quantitative • Qualitative • Method

Rowbottom’s question – ‘Educational research as science?’ – has been the subject of much (often heated) debate since the quality and relevance of educational research came under heavy criticism in the UK and USA in late 1990s and early twenty-first century. Within the UK, a number of high profile documents condemned educational research (for example, Hargreaves 1996; Tooley and Darby 1998; Hillgale et al. 1998), while the then Secretary of State for Education and Employment, David Blunkett, accused the educational community of ‘ivory-towerism’. Within the USA, the stakes were even higher with a federal take-over of public education and the exaltation of randomized controlled trials (RCTs) as the method *par excellence*.

While the terms and substance of the debate have evolved, the debate itself is not yet dead. In 2009 the journal of the American Educational Research Association, *Educational Researcher* published a special issue entitled ‘Epistemology, Methodology, and Education Sciences.’ At the heart of this contribution to the debate was the extent to which quality within educational research should be equated with ‘science’ and what indeed counts as ‘scientific’. Such issues have plagued not only the discipline of education, but also the

social sciences in general for many years, and have resulted in what have come to be termed the ‘paradigm wars’ or ‘methodology wars’. Quantitative (read as *positivist*) research has been aligned with a scientific approach based on a natural scientific model (for those members of the community who are less than impressed with this alignment, the term ‘physics envy’ is employed), while qualitative research has usually been aligned with a more interpretative framework. These different approaches are in an epistemological sense at polar opposites and considered to be incompatible. Moreover, as opposing positions, they are often caricatured, although one must not underestimate the effect of these caricatures on new researchers, and particularly on postgraduates’ conception of educational research.¹ It is obvious, however, that in any such discussion of the notion of educational research as ‘science’, we need to have a clear understanding of what science is and how it proceeds in the first instance. To what extent is there a misconception of science in operation (see Rowbottom and Aiston 2006)? And are there other and more fruitful ways to characterize science, which move us beyond a misconception or a narrow reading of the nature of science (Phillips 2013; Smeyers 2013; Scriven 2013)?

S. Aiston (✉)
Faculty of Education, University of Hong Kong, Hong Kong
e-mail: aiston@hku.hk

¹For example, Bredo (2009) notes that many students adopt a bipolar view of research methods.

As alluded to above, certainly within the USA, RCTs have been described as the ‘gold standard’ in terms of providing scientific quality. In spite of the National Research Council’s (NCR) report (*Scientific Research in Education* 2002), which attempted to challenge in part the federal government’s position, RCTs were heralded as the pre-eminent method. Although Howe suggests that the NCR report does espouse a ‘new scientific orthodoxy’ that codifies a ‘positivist’ approach to educational research (Howe 2009). Proponents of the view that experiments in education are the best way to proceed do concede that non-experimental activities, such as correlational and descriptive studies, have a role to play within educational research, *but* only as ‘components’ of experiments (Slavin 2002). In essence what we have is a methodological hierarchy; in this context all other approaches are regarded as subservient to experimental design, particularly the ‘gold standard’ of the RCT. Indeed, the situation in the USA is such that a hierarchy can be argued to extend to quantitative and qualitative research in general, with quantitative research ultimately being regarded as superior in its generation of ‘hard’ data, as opposed to the ‘soft’ data resulting from a qualitative approach. When this is the terrain for the justification of research, feminist researchers and critical theorists, amongst others, have to fight hard to establish the legitimacy of their approaches to inquiry, both on methodological and epistemological grounds. As Lather notes the landscape is dominated (quoting Gherardi and Turner) by a ‘militantly empiricist and quantitative movement’ where a “desire for hardness with its claims to produce findings that are verifiable, definitive and cumulative, is set against a softness where interpretation is central and findings are subject to debate and reinterpretation” (Lather 2004, p. 765).

In this sense, as Rowbottom points out, it is fair to say that there is a both a taxonomical and normative sense in which we can understand science. While within the aforementioned discussion, there is clearly a normative sense with respect to the way in which we *should* conceptualise educational research as science.

But what does the philosophy of science and more specifically Rowbottom’s chapter have to offer? First of all, it is cautionary. In response to ‘physics envy’, Rowbottom provides examples from this (allegedly) hard science *par excellence* and seeks ‘to trim unrealistic expectations for educational research’. Most striking is the example of the lack of RCTs in episodes such as the discovery of Neptune (which we would certainly celebrate as scientific successes). If educational research is to emulate physics, where experimental designs do have a significant place, we would do well to remember that RCTs have a minimal role to play.

Second, it sensitizes us to the role of context. Within his discussion of quantitative and qualitative approaches, Rowbottom argues that ‘one cannot fruitfully apply mathematics

without making qualitative distinctions’ and that ‘one simply has to look at the specific problem one is trying to solve. . . which approach is better is a function of context’ (p. X). In this sense there is no approach *par excellence*, merely a requirement to ensure that methods should be judged in terms of their appropriateness for addressing a specific question. Indeed, this was advocated in the NCR report as an important ‘scientific’ principle, although again, Howe points out that qualitative methods are assigned a subsidiary role within the report. Feuer avers that ‘no method is good, bad, scientific or unscientific in itself: Rather it is the appropriate application of method to a particular problem that enables judgements about scientific quality’ (Feuer et al. 2002, p. 8). World-renowned scientists do not confuse science with method (Berliner 2002, p. 18).

Third, it alerts us to the constraints on the quest of practising ‘good’ science and the risks along the way to securing this end. For example, despite governments’ best intentions to fund ‘scientific’ research, their intervention, or rather interference in setting research questions and prescribing research methods can lead to exactly the opposite, namely bad ‘science’ (see Rowbottom and Aiston 2010). Take the following example from a UK invitation to tender. The research questions to be investigated are as follows: ‘whether or not students tended (and still tend to be) awarded lower grades than appropriate in their [vocational examinations], indicating a problem with the grading of [the] examinations’ and ‘to the extent that attainment in [vocational] examinations has tended to be lower than for traditional [non-vocational] examinations – whatever that extent might be – can plausible explanations be found?’² The sponsor notes that possible explanations might relate to assessment, resource, teacher and student factors. They then go on to specify the detailed statistical analysis of various data sets already in existence. Such an approach might well help to answer the first research question, but will not go any way to answering the second, i.e. provide an understanding of *why* there seems to be a discrepancy in terms of the factors they themselves highlight as offering possible explanations.

Relatedly, non-empirical research might also be sidelined in pursuing the quest for educational research understood as science only. For example, the NCR report advocates that scientific research in education should pose significant questions that can be investigated empirically. However, Rowbottom’s example of Stevinus’ thought experiment illustrates how within science one does not have to proceed empirically to make a discovery. On the basis of reason and prior experience, Stevinus derived the Principle of the Inclined Plane by considering a string of balls draped over

² Performance in GCSE (General Certificate of Secondary Education) Examinations in Vocational Subjects (GCSEVs), Invitation to Tender, Qualifications and Curriculum Authority, 2005.

a triangular prism. As Rowbottom notes, “we have our principle of mechanics, but got there in a way that is not obviously empirical. So if we can do this in mechanics, then why not in educational research?” (p. X).

Furthermore, if we conceptualise ‘method’ in the broadest sense (not just isolated to an actual technique) we could argue, referring back to Rowbottom’s example of the discovery of Neptune and the failure to discover Vulcan, that plausibly there was no real method, no process *per se* that could lead us ‘unerringly’ to, or towards, the truth. In essence, the process was one of guesswork, or trial and error. An anomaly in the data raised a problem which there was no single correct way to tackle; logic did not tell us what to do. Despite equivalent circumstances, on the one hand the appropriate route was to abandon the theory (in this instance Newtonian Mechanics), and on the other to retain the theory (in this instance, using Newtonian Mechanics to predict the orbit of Uranus). In a sense, what this example highlights is the messiness of scientific research, which contradicts the notion of science as a clinical, clean, neat process:

Linear models of progress are put aside in favour more jagged ones. Mistakes are made as science moves forward. The process is not infallible. Critically, the history of science teaches us that there is no algorithm for scientific progress, but rather that science advances through a complex combination of professional criticism and self-correction.

(Feuer et al. 2002, p. 6³)

Law (2004) considers the ethnography of knowledge practices (including the practice of science), pointing out that ethnography:

...lets us see the relative messiness of practice. It looks behind the official accounts of method (which are often clean and reassuring) to try to understand the often ragged ways in which knowledge is produced in research. Importantly, it doesn’t necessarily distinguish very clearly between science, medicine, social science, or any other versions of inquiry. (p. 18)

Fourth, Rowbottom’s chapter illustrates how the notion of ‘objectivity’ within educational research can be problematised, and not just by those researchers who are troubled by the equation of quality with ‘science’ (St Pierre 2002). Hodkinson suggests that within social and educational research it is now widely accepted that there is no possibility of theory-free knowledge or theory-free observation (Hodkinson 2004). Many feminist researchers, for example, have rejected grounded theory⁴ on the basis that no feminist study can be politically neutral, completely inductive or solely based on grounded theory, since all research is theoretically grounded (Morley 1996). But equally this is the case within

science. Francis Bacon’s seventeenth-century notion that scientific thinking exemplified ‘minds washed clean from opinions’ is a rather idealistic conception of science. In his discussion of theories and observations, Rowbottom (drawing on the work of Duhem and Kuhn) argues that all observation is theory-laden.⁵ It is not possible to take ‘pure’ facts which are independent of a theory that can be analysed ‘objectively’:

[A]ll observation involves interpretation in the light of our theoretical knowledge... pure observational knowledge, unadulterated by theory, would, if at all possible, be utterly barren and futile.

(Popper 1963, p. 30, quoted in Rowbottom and Aiston 2010)

Furthermore, theory choice is value-laden. There may be multiple theories that potentially could explain the same phenomena: on what grounds should we choose one above another? Should one choose the simplest theory, or that with greatest explanatory power? In the end, this choice is relative to the individual, even if a community agrees on which values are important.

Rowbottom in his conclusion briefly refers to the issue of complexity, encouraging us to believe that natural science can be as complex as social science. Space permitting, further examples of scientific episodes that demonstrated this point would have helped to alleviate the concerns that the complexity of educational research cannot be, as Lather comments, ‘fantasised away’.

The debate to date has focused on the extent to which educational research is, and should be, ‘scientific’. By broadening our conception and understanding of what science is we can move towards, as Johnson (2009) would hope to achieve, a more inclusive “Scientific Research in Education”. However, it is important to be mindful when considering the question of what is ‘science’ that the “consensus in academic philosophy of science today seems to indicate that there is no essential definition of science and no unproblematic criteria of demarcation” (Johnson 2009, p. 453). Given this, the demarcation that is currently being made within educational research with regard to ‘science’ versus ‘non-science’ is not only arguably unfounded, but is also divisive. In essence, the fundamental question we must ask ourselves is what counts as good inquiry.

Note on Contributor

Sarah Aiston is an assistant professor in the Faculty of Education, University of Hong Kong. She developed an interest in research methodology during her previous

³ Feuer et al. 2002 referring to the work of Stranges, Lakatos and Musgrave and Popper.

⁴ The idea that theoretical ideas emerge out of one’s data.

⁵ See Joanna Swann (2003) for a Popperian discussion of this issue.

employment by the National Foundation for Educational Research (UK), and has taught research methods courses for several years. She has published in the *British Educational Research Journal* and the *Journal of Philosophy of Education*.

References

- Berliner DC (2002) Educational research: the hardest science of all. *Educ Res* 31(8):18–20
- Bredo E (2009) Getting over methodology wars. *Educ Res* 38(6):441–448
- Feuer MJ, Towne L, Shavelson RJ (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Hargreaves DH (1996) Teaching as a research-based profession: possibilities and prospects, teacher training agency annual lecture. Teacher Training Agency, London
- Hillgate J, Pearson R, Anderson A, Tamkin P (1998) Excellence in research on schools. Department for Education and Employment, London
- Hodkinson P (2004) Research as a form of work: expertise, community and methodological objectivity. *Br Educ Res J* 30(1):9–26
- Howe KR (2009) Positivist dogmas, rhetoric, and the education science question. *Educ Res* 38(6):428–440
- Johnson RB (2009) Toward a more inclusive “Scientific Research in Education”. *Educ Res* 38(6):449–457
- Lather P (2004) Scientific research in education: a critical perspective. *Br Educ Res J* 30(6):759–772
- Law J (2004) *After method: mess in social science research*. Routledge, Abingdon
- Morley L (1996) Interrogating patriarchy: the challenges of feminist research. In: Morley L, Walsh V (eds) *Breaking boundaries: women in higher education*. Taylor and Francis, London, pp 128–148
- Phillips DC (2013) A guide for the perplexed: scientific educational research, methodolatry, and the gold versus platinum standards. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 129–139
- Popper KR (1963) *Conjectures and refutations*. Routledge, London
- Rowbottom DP, Aiston SJ (2006) The myth of “scientific method” in contemporary educational research. *J Philos Educ* 40(2):137–156
- Rowbottom DP, Aiston SJ (2010) The use and misuse to taxpayers’ money: publicly-funded educational research. *Br Educ Res J*, 37(4): 631–655
- Scriven M (2013) The logic of causal investigations. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 163–171
- Slavin RE (2002) Evidence-based education policies: transforming educational practice and research. *Educ Res* 31(7):15–21
- Smeyers P (2013) The design(s) of educational research: description and interpretation. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 67–76
- St Pierre EA (2002) “Science” rejects postmodernism. *Educ Res* 31(8):25–27
- Swann J (2003) A Popperian approach to research on learning and method. In: Swann J, Pratt J (eds) *Educational research in practice: making sense of methodology*. Continuum, London, pp 11–34
- Tooley J, Darby D (1998) *Educational research – a critique: a survey of published educational research*. Ofsted, London

Michael Scriven

Abstract

A familiar quest in the realms of educational research is to seek and produce knowledge that is ‘beyond reasonable doubt’. Framed as a journey and marked by challenges of ‘burden of proof’, it has become closely associated with a logic that argues the validity and superiority of a research design by applying a randomized controlled trial. But what is actually required if research about education is to be generalized beyond the task and context to hand? Is establishing the theoretical basis and limits of inference non-negotiable? Indeed, do the standards of evidence in educational research always require claims that are testable and verifiable by others, or when might some other consideration, criterion, or quest be more apt? Such issues are widely debated in the literatures on educational research and evaluation, attracting particular scrutiny when a ‘gold standard’ is proposed for what to prefer – and fund – as studies of education. The chapter illustrates why critical observation and logical reasoning matter in interpreting the quality and usability of particular methodologies and findings as much as in designing a research strategy, especially when due consideration of theoretical, methodological and practical constraints is absent or muddled in accounts of research design and meta-analysis. The chapter then, raises the value of pausing: at recognition of configuration rather than defaulting to the pursuit of causation amongst factors, and at the challenges presented by elevating certainty to the status of sine qua non for legitimate, research-based knowledge in education. In short, monolithic research strategies are found wanting; while the promise and prospect of moving beyond impasse between ‘warring parties’ – such as via mixed methods – are also considered.

Keywords

Casual claims • Randomized controlled trial • Experimental design • Quasi-experimental design • Mixed methods

Introduction

It may be time for a new attempt at an overview of the alternative ways to establish causal claims. Much mainline scientific research centers around causal claims, as does much research in history, legal studies, and evaluation, and

the current ‘causal wars’ threaten the validity of a great deal of this work. Moreover, much of this work, for example, in the evaluation of services and medicines for international aid, affects the approval and hence the delivery of vital products and services, so the welfare of large numbers of people depends on these decisions about validity. The proposal here is a composite of some of the existing, often conflicting, arguments with some new ones, but it is not a compromise that will appeal to all parties since it contradicts or omits several other existing arguments, and some of the new twists will surely be resisted. But it does incorporate

M. Scriven (✉)
Division of Behavioral and Organizational Sciences, Claremont
Graduate University, Claremont, CA, USA
e-mail: mjscriv1@gmail.com

strong support for major planks from the competing platforms and strong support for the importance of some cooperative efforts. It may be the most inclusive defensible approach to a compromise.

The Position Focuses on Three Main Themes

A. It seems useful to distinguish about eight methods or groups of methods for establishing causal claims to the highest scientific standards of validity that are widely used in mainstream scientific domains. One of these methods is the randomized controlled trial (RCT), the entry currently sanctified by a large group of good scientists, but the validity attained by its use is not in the slightest degree superior to that achieved by any of the others, across the board. As with all the others, there are important research problems posed in a context of particular investigatory constraints, when an RCT design is demonstrably the best choice, just as there are many other cases where it is useless or substantially inferior. One reason that it has recently attracted a great deal of support, including frequent reference to it as ‘the gold standard’ for causal investigations, is here described as its ‘conceptual superiority.’ While it certainly has this property, this is widely and incorrectly supposed to confer upon it some *general* advantage in achieving greater validity. It has that advantage only in a head to head competition in cases to which it is best suited; in other cases other approaches will give equally certain results when RCTs cannot operate at all, or can operate but represent a bad choice, for reasons of, for example, cost, delays, ethics, or side-effects.

The reasons why conceptual superiority is not the same as sole ownership of certainty (‘validity superiority’) are set out below and these reasons, along with some indisputable problems with the RCT design in the contexts where it is favored today, make the application of the term ‘gold standard’ to it basically a sign of scientific illiteracy. A more severe case of this affliction is symptomized by the suggestion that the phrase ‘evidence-based’ should be restricted to causal claims supported by RCT research. This view is classified as more severe since it not only dismisses the possibility of providing evidence of causation in half a dozen other entirely satisfactory ways, but it also dismisses as lacking in evidential support a raft of highly significant and frequent causes such as warfare, heroin, plate tectonics, sexual attraction, political pressure, heavy smoking, and HIV/AIDS, none of whose mighty effects were ever established by RCT studies.

B. There *is* a gold standard for determining causation, and it is the same gold standard that applies throughout the whole of science, namely the use of critical observation, either on its own or connected to conclusions by logical reasoning. That is, causation can be directly observed, in lab or field: it is simply one of many contextually embedded configurations such as lead melting in a crucible, eggs frying in a pan, or a hawk taking a pigeon, that can be directly observed. And causation can of course also be inferred from non-causal direct observations, as by the coroner performing an autopsy. How the latter is done, with or without the use of a theory,¹ is set out here with some care, since the particular logical connections required to establish causal conclusions by inference deserve to be more widely understood in their own right as part of the logic of causation, and also need to be distinguished from three logical properties that are often incorrectly proposed as relevant to this task: (i) the ‘conceptual superiority’ property of RCTs; (ii) the scientific desideratum of replicability; (iii) the scientific desideratum of falsifiability.

C. Assessing the merits of any or all of the several types of causal investigatory design involves two standard types of evaluation (grading and ranking) and is addressed in the two preceding themes.² A more complex logical type of evaluation is involved in decisions about the funding of research (apportioning, the type of evaluation on which portfolio or budget allocations are based). In assessing proposed solutions to each or these problems, there is an important ethical requirement, but while this can be accommodated in RCT design (by using great care in the details of the design), it has a more important role in the evaluation of any research funding strategy that gives a dominant role to RCT designs. The key theorem governing the latter, established in the chapter, is as follows. Even if a particular method such as RCT were the best method for investigating causation whenever it can be used (a possibility that is disproved in the discussion of theme A) it is impossible to defend the strategy or policy of allocating research funds to RCTs in (anything like) all and only those cases. Such a strategy, now

¹For an example of observations that, mediated by a theory, demonstrated causation, think of the observations of the solar eclipse of 1919 that showed sunlight was refracted by gravity as predicted by the general theory of relativity.

²The eight types of causation are based on: (i) direct observation, e.g., visual, affective, tactile; (ii) reported observation, e.g., case studies; (iii) eliminative inference, e.g., autopsy, engineering breakdown; (iv) theoretical inference, based on use of an analogy/theory, e.g., physics, geology, astronomy; (v) direct manipulation e.g., in the kitchen and lab; (vi) ‘natural experiments’ e.g., meteorology, epidemiology; (vii) quasi-experimentation, e.g., medicine, pedagogy; (viii) RCTs e.g., pharmacology.

widely enforced or recommended, is not only logically indefensible, but also can be shown to be morally unacceptable because of the effect it has on those dependent on the service that may be withheld because of that strategy.³ While it has the advantage of being ‘fail safe’ in avoiding one type of error, it risks being overconservative when urgent needs are involved, and the balance between these two considerations in fact goes heavily against it.

The Ontogeny of Causation

The first of the two foundation stones to be laid in constructing the logic of causation is the proposition that causation is directly and reliably – indeed trivially and universally – observable. It is perhaps best to approach the proof of this by looking at how we acquire the concept of causation. It is developed in the child’s brain before language skills are well developed and it springs from the palmar (“grip”) reflex which soon develops considerably: into the child’s realization that s/he can manipulate the environment by shaking a rattle to make a noise; the recognition and manipulation of crayons for producing marks on paper; and the discovery that squeezing the cat makes her scratch. These are all cases of understood causation and indeed, by the age of 3 years, the average child has discovered some things that are much more sophisticated, beginning with how to cause others to do things upon request – and indeed becomes notably ‘bossy’ about such demands. Also acquired are the basic notion of responsibility for his or her actions, resulting in blame when they are bad and praise when they are good, and the disclaimer of responsibility for ‘bad’ actions – e.g., knocking something over – when the wind or a sibling did it. Soon there is language to express all of this, and the youngster rightly claims to see others do things, as well as being able to get others to do things. In other words, their experience now includes the management as well as the observation of causation, and the evaluation of consequences. Maturation simply brings greater range and sophistication to these basics, so there’s nothing essentially new about such claims as the adult makes, for example, that the brakes are working well in his or her car, every datum for this generalization being a (tactile) observation of causation.

³ My thanks to Ryoh Sasaki for raising some problems with an earlier draft of this overview that I hope to have resolved in this version.

Direct Observation of Causation

Despite the commonplace use of our language to the contrary, Tom Cook (at least sometimes, in conversation) and many well-trained social scientists and educational researchers, following Hume, find it hard to accept the notion of observed causation. They appear to favor the idea that we are ‘really’ inferring it. But that’s like saying we ‘really’ infer that this person we see in the crowd meeting the passengers from our plane into San Francisco is our spouse. Of course, the neural net is, in some sense, putting bits and pieces together, but that’s part of what happens in *perception*; the end result of these neural machinations is pattern *recognition*, not pattern *inference*. Hume’s pitch was seductive because we don’t see causation in quite the same way we see color and motion. Causation, like many other complex predicates, refers to a learnt holistic feature of a *configuration* not just to a learnt *element* in it. That configuration is what enables the billiards player to say, in suitable circumstances, that he did indeed see the cue ball strike the object ball, and thus *cause* the latter to head for the pocket. Once one learns how to see this kind of example of causation, it becomes part of the *perceptual* vocabulary, like the myriad instances of your friend’s face, or even part of perceptual evaluation, for example, part of what is called a good seat in an equestrian, or good style in a dismount from the parallel bars or in dunking a pass in basketball.

This epistemic status of causal claims as observable is fully recognized in the one place outside science where doubts are best respected, the court of law. Eyewitness testimony, especially but not only if it meets all the well-defined standards (normal vision, good lighting, clear field, propinquity, recency, corroboration, absence of motive to lie, and so forth), is treated there as in science, as an appropriate datum in the court of last resort for establishing a case. And the examples of it regularly include testimony that causation was observed in the standard cases such as battery, vandalism, and shooting. Causation is part of the language of observed acts, and as part of the language of observation, in suitable circumstances, it is established as having occurred with all the credibility that observation deserves, in science as in law.

So the first key conclusion here is that the simplest and probably the most reliable of all ways to establish causation is by critical observation. (I use the term ‘critical observation’ here as shorthand for observation subject to the usual checks for the usual sources of error, including reflection on the likelihood of those.)

Interestingly enough, close study of the bible on quasi-experimentation, Cook and Campbell (1979), turns up a passage in which this view is conceded, although its implications for causal methodology were never developed there:

... we do not find it useful to assert that causes are “unreal” and are only inferences drawn by humans from observations that do not themselves directly demonstrate causation

(Cook and Campbell 1979, p. 33).

This position leads us to the second foundation stone for the logic of causal inquiry.

Scientific, Legal, and Practical Certainty

One of the main attractions of the RCT approach is that it appears to provide a greater degree of certainty than alternatives. There is a sense, or at least circumstances, in which this is true, but it is not true across the board for several reasons, of which the first is that causal claims based on direct critical observation attain the benchmark level of certainty, and it's very hard to find an RCT that matches that standard. The 'benchmark level' in scientific research, as in the criminal law and in common practice where important matters are at stake, is simply “beyond reasonable doubt.” This is the standard required to establish a case in criminal law, and is traditionally and extensively distinguished from ‘the balance of evidence’ which is the criterion for establishing the occurrence of misdemeanors.⁴ This concept of certainty is part of the common language of science, so that in the lab or field, the observer or reasoner knows when to make and how to understand a claim that someone is certain that they did, or saw, or calculated, that some description applies.

This is not careless use, or abuse, of the term, it is the proper use of the term, it illustrates what the term does in fact mean. Some strands of perfectionist argument in epistemology here, as with perception and causation, have sought to persuade us otherwise, pushing us in this case towards the idea that the proper use of ‘certain’ refers to the complete impossibility of error as in definitional claims and mathematical theorems. But ‘certain’ is a contextually defined term and the proper standards for its use in the context of empirical discussions is empirical support beyond reasonable doubt, not the same standards as apply in talking about the realm of deductive proof. One might as well argue that the term ‘large’ is improperly used of an emu's egg, or an elephant, or anything smaller than the universe. The perfectionist move is just an example of bad linguistic analysis. The law courts remind us that there is a well-established body of rules for the proper use of terms like ‘observe’ and ‘certain’ beyond what is sometimes scoffed at as the

⁴ Robert Brinkerhoff makes this case very well in his book, *The Success Case Method* (2003) in the course of defending his high quality case study-based approach to causation.

imprecision of ordinary usage. The courts define the hard core of ordinary use, since that is what the juries understand, and that is what good scientific use employs. Even Tom Cook concedes, in his magisterial review of the arguments for and against the RCT design,⁵ when talking about case studies (where we often rely on reported observations of causation), “I do not doubt that these procedures sometimes reduce all reasonable uncertainty. . .” (ibid., p. 38). And that is just the conclusion we need to establish, for that is all that can be reasonably required of any scientific method for establishing causation.

The RCT Advantage

Now RCT designs do have an edge, although not the edge that is often claimed for them. As Tom Cook goes on to say in the quote begun just now (ibid.):

I do not doubt that these procedures sometimes reduce all reasonable uncertainty, though it will be difficult to know when this has been achieved. However, I do doubt whether intensive, qualitative case studies can reduce as much uncertainty about cause as a true experiment. That is because such intensive case studies rarely involve a totally credible causal counterfactual. Since they typically do not involve use of comparison groups, it is difficult to know the group under study would have changed over time without the reform under analysis

(Cook 2000, p. 38).

The first problem with this passage – and with this position, which is the basic argument for the superiority of the RCT (a.k.a. ‘true experiment’) design, is that the RCT design, as used in the cases under discussion here, does *not* support a counterfactual. The RCT design as used in traditional pharmacological research, does have this property. But in educational and community interventions, the design is crucially weakened and is no longer double-blind, as it is in the drug studies. It is not even single-blind. That is, both the subjects and the researchers know who is in the experimental group, and usually both know which subjects are in the control group. This leaves open a gap through which the Hawthorne effect (and its converse) can slip in. (I refer to this situation as a ‘zero-blind’ or ‘unblinded’ condition.) As Cook and the texts define the RCT design, the key point about it is that after randomization (and assuming adequate group size) the only relevant difference between the two groups is the treatment; but in the context we are discussing, there is another difference, namely the difference in the

⁵ “A critical appraisal of the case against using experiments to assess school (or community) effects” *Education Next*, 2000, Hoover Institute, Stanford. This paper of his represents by far the most sophisticated support for the RCT position in print, and for that reason I focus on it frequently in this discussion.

beliefs of the subjects and experimenters, which we know can cause effects of the type and size we are finding from treatments, and so we cannot conclude that differences in outcomes must be due to the treatment.

So the intensive case study (and the same applies to good quasi-experimental designs and critical observations) is not essentially disadvantaged against the RCT; both leave open other explanations of any effects.

Might it not still be argued that the RCT has an edge in only having this one loophole, whereas in the other designs there are, at least typically, more possible counter-explanations? This is not as telling a point as it might appear, since the total probability of the alternative explanations is not additive by the number of their descriptions; it is entirely situation-dependent. There will be situations where the Hawthorne possibility is more threatening to the RCT than the totality of the alternatives is to a case study or quasi-experimental design; this will be quite common in the case of the regression-discontinuity design for example, but will occur in many other cases. So the RCT edge, significant though it is when the design is double-blind (although even then not a general edge on validity), is entirely situation-dependent in the normal context of social and educational inquiry. It will still be significant in special cases, but non-existent or negative in others.

The second problem with the quoted argument for the RCT's superiority is that causation may occur in the absence of support for a counterfactual, as it does in cases of overdetermination. I have discussed these cases at some length elsewhere⁶ and will only remark that it is a significant although not crucial weakness of RCTs for the purposes of the present discussion that they will not have any advantage at all in such cases, whereas case studies (and some other approaches, e.g., those based on theory) will do so.

The bottom line here is that the advantage of RCTs is by no means general and must be established in the particular case, a non-trivial task. It remains true that there are cases, including important ones, where the RCT design will settle the issue of causation and no alternative approach will do so as well. However, the same is true for many other designs. The conclusion for researchers is simple; each case needs to be highly specified, including not just the exact question we need answered and the degree to which we want to be able to generalize the answer, but the exact constraints on time and resources and social context, before one can decide on the optimal design for an investigation. That analysis obviously is not best done by those who specialize in RCTs alone; it must involve serious discussion by a panel including those expert in alternative approaches of several if not all of the

kinds listed earlier. As Cook stresses, relying on a single approach is a methodological error and a serious one; and relying on the wrong one compounds the felony. Using a panel which favors just one approach would be a further felony in itself.

The Other Contenders

Every child acquires a repertoire of possible causes for a large number of effects before reaching school age; for example, they know that the vase on the table by the window can be knocked over by the wind, the shades, the cat, a sibling, a playmate, or a grown-up. When they encounter the effect, they begin to sift that list and check for indicators, either immediately observable or quickly accessible, that will eliminate one or more candidates and eventually may identify the responsible cause. This is the basic case of hypothesis creation and verification and it is the essential element, even if subliminally and non-inferentially, in all careful causal explanation.

There is a background assumption for this enterprise – the assumption that everything has a cause. Truth of that assumption in the macro-domains of everyday experience and scientific investigations is unaffected by the discovery of micro-uncertainty, not because the latter phenomenon cannot manifest itself at the macro-level – indeed it can – but because it has a sufficiently small incidence at that level to leave the deterministic principle unaffected as a methodological guide.

The two key components in the basic procedure outlined are the 'list of possible causes' (LOPC), based of course on memories of prior personal or reported observations, and the 'general elimination methodology' or algorithm (GEM). Both become increasingly complex as the individual's experience and learning expand, for example by the addition of theories about possible causes that are extrapolations, or extensions by analogy or speculation, from a human's direct experiences. Take, for example, the theory of tectonic plates that added to the list of possible causes of mountain ranges. No-one saw those plates collide and raise the Rockies or the Urals, but we all can visualize what happened on a smaller scale, and once conceived, we add it to the LOPC and can readily project the kind of clues in the geologic record that would confirm this etiology, thus kicking in the GEM process that in fact confirmed the hypothesis.

When the hypothesis is about the formation of star-clusters, we begin to move beyond models that are based on analogies with ordinary experience, and instead create formal models that extrapolate from those models or even from models that seem to have worked in other areas beyond direct experience. So the piggy-backing continues, stretched to its limits with string theory at the macro limit and boson/hadron models at

⁶ For example, in "Causes, Connections, and Conditions in History" in *Philosophical Analysis and History* ed. W. Dray (1966).

the micro limit. In all of these realms, however, the concept of causation continues, usually unchanged by the changes in the forms to which it applies, except for quantum uncertainty, where it, too, must be modified significantly. And in all these areas, for all these kinds of causal claims, the same procedures of investigation apply; that is, the process of LOPC identification, and GEM application to whittle the list down in particular cases.

This vast web of theory-driven causation is essentially independent of any direct experimental confirmation since it deals with entities that are largely beyond the range of manipulation. The large hadron collider at Geneva, is the culmination of the main exception to this segregation, the zone of experiments with fundamental particles. But even there, where the term ‘experiments’ is always used, it does not refer to experiments with randomized controls, but to those ruled by simple pre/post design, entirely adequate in those circumstances to establish the conclusions to the satisfaction of the Nobel Prize committees. It is simply absurd to suggest that the conclusions arrived at in these circumstances do not deserve to be called ‘evidence-based’ because there is no RCT in sight. To avoid tilting at windmills, it seems that we should modify the overgeneralized claims of the more enthusiastic supporters of RCT and allied terminology so as to retain a reasonable position to consider.

The Limited RCT Position

These controversial terms should be flagged in some way to indicate that they are not intended to be taken in their normal, all-contexts, sense, so we’ll add the prefix ‘limited’ to their use in these restricted senses. This has the effect of converting positions that are absurd into ones that can be argued against without using such language as ‘absurd’. Instead of saying, as the head of the Institute for Educational Science has pronounced, that there is no scientific basis for any causal claim that is not based on RCT studies, we’ll take that as meant to apply to zero-blind (a.k.a. limited) RCTs used to investigate current (i.e., limited) issues about *the effect of typical large-scale interventions in areas such education, health, and social services*. Correspondingly, we’ll take the term ‘evidence-based’ which is often said to be justified only for the results of RCT studies, to be intended to apply to limited RCT studies, *only* when talking about the effects of that kind of limited intervention in those limited kinds of areas.

The thrust of the preceding arguments is then that the limited claims are nevertheless wrong, even if not absurd. That is, even the view that only (limited) RCTs can establish limited causal claims is wrong, since they can be perfectly

well established beyond reasonable doubt in other ways *and* the limited RCTs aren’t bulletproof themselves. Similarly, the view that the only (limited) evidence-based claims are those supported by RCT studies is wrong, since even limited evidence-based claims (that is, claims about typical current types of intervention in health, education, and social services) can be established by quasi-experimental, observational, and theoretical studies. Finally, the claim that ‘experiment’ means a design with random allocation to the two groups should also be modified to the formulation “limited experiments are those in which subject are randomly allocated to groups.”

This triple modification prevents what many have seen as an extremely tendentious, if unconscious, attempt to hijack an important slice of the scientific vocabulary.

Quasi-Experimental Designs (QXTs)

Let’s walk through the consequences of the preceding arguments, using a common ‘lower-class’ QXT, the pre-post design with comparison groups. The argument given here would be much stronger with what is commonly thought of as a fancier a.k.a. more robust design, for example the interrupted time series design with bounded randomization of the intervals between applications. The example we’ll use is an example of the use of the highly-interactive paradigm (HIP) for large introductory lectures at the college level, with enrolments in the low three-digit category. We divide the entering class in about half, in some convenient but not random way, e.g., by taking the morning class as the treatment group in the first semester of the experiment (sic) and using the afternoon class for the second semester of the experiment (this is a one-semester class). The experimental group receives the new treatment, the others get the same approach that has been used for several years; the same instructor teaches both classes and teaches the control group just as he has for some years. That claim of approximate constancy in treatment is verified by an experienced colleague who visits a few times unannounced, and by a Teaching Assistant who’s done that job previously and now works for both classes. Let’s add that we have an experienced pair of instructional researchers independently look for other differences and find none to remark on. Each class gets the same pre-test and post-test; they match closely on the pre-test but on the post-test, where the control group shows about one sigma of improvement, the HIP group scores about two sigmas better than that; and this effect recurs on two reiterations, the only two that are done as of report time for the 3-year experiment.

Now, did HIP have any effect? Given that you know the important ‘local knowledge’ fact that it’s extremely hard to kick a sigma difference out of any variation in instructional method, and that two sigmas is considerably more than twice as hard to get as one, the answer has to be, yes, HIP made a big difference.⁷ Clearly the size of the difference is crucial here, as is often the case. Conclusion: there are situations where non-RCT designs will provide support for causal claims, beyond reasonable doubt. If you now reflect on exactly what it would take to convert this study into even a limited RCT study, and on the fact that you are not very interested in small differences, because they have a track record of never showing up on the replications at distant sites, you should be willing to buy the conclusion that the pre/post/comparison study design is better than the RCT here. (That is, you use it knowing that it’s a net that will catch only big fish, but you don’t want little fish.)

There are a dozen variations on this kind of case, ringing the changes on such matters as dealing with cases where you are only interested in generalizing to the native population in Uganda, but the native population won’t give permission for putting their children into the control group; or you can’t afford the cost of measurement and monitoring for the control group of ex-addicted homeless, and the memory effects of vitamin shots are small, so interrupted time series will work well.

So the bottom line is that there are many cases where non-RCT designs will be better than RCT ones for the cases of interest, cases where they will indeed achieve results beyond reasonable doubt, and even more cases where they will be better than limited RCT designs, the only ones we’re really talking about. The limited strategy, which protects the RCT position from absurd overstatement, still cannot save it from being beaten on its own ground, that is on ground where it *can* be used. Like a good two-wheel drive car, it can be driven in snow, but it’s easily overmatched by the four wheel drives in those conditions.

The fundamental logic of causal investigation, that is, the rules of inference required for establishing any causal conclusion, is not the use of experiments in the limited sense, it is the use of a critically developed list of possible causes together with critically applied general elimination methodology, required even for the justification (although not the occurrence) of critical observation.

⁷ There is a huge online literature of debates about whether pre/post testing provides a valid basis for such conclusions, one of the reasons I use this example. Google Richard Hake (and gain scores), to see the whole debate well-referenced by the leading proponent of the common-sense position here, which is of course that pre/post works fine for any worthwhile effects if done carefully.

Funding Strategies

It is now time to turn from the logic of grading and ranking experimental designs to the distribution of resources between them. The first lesson to be learnt about the logic of portfolio construction is that the best single investment – better than every alternative although it may be – is not the best bet for the whole portfolio budget. Investment managers know very well that the rule about not putting all one’s eggs in one basket is not just valid for the medieval housewives who inspired the adage and their successors. Provided only that one’s second and third choices still meet the minimum acceptable standards for good eggs, they are better choices than further investment in the top pick for at least half the portfolio.

In research funding, a much-better-than-minimum-acceptable standard is the ability to produce conclusions that are beyond reasonable doubt, so even if RCTs were superior in their ability to yield such results across the board (which is itself a true counterfactual) it would be highly unscientific to back them across the board since they, like all other designs, can go wrong, badly and completely wrong, in a way that is usually not reversible even if detected, and is not always detectable at mid-stream.

But in scientific research there are two distinct further reasons for the heterogeneous strategy besides protection against failure. It may be helpful to think of the analogy with an investor who decides to put some money into the stock of companies who are working on a new oil field. She could put all her money into one company that has an excellent production hole that is currently the best on the field and is planning to drill more wells on that site. But she knows that a single site can peter out, hit an artesian aquifer that drowns their wells, or run into labor trouble; so for simple *safety* reasons – our first consideration – she will buy into at least one other outfit. She’s covering herself against the possibility of failure. But there’s another reason to do so: wells that begin with a less than stellar rate of production sometimes hit another pocket below the first and do much better later: so there’s a chance of doing better by approaching the formation from two directions, even if the second one is less productive at first. That’s the possibility of *superiority* via backing an independent approach. And there’s a third reason, too, probably enough reason to justify investment in a third wildcatter. This is the chance to get a better overall picture of the layout of the field, which will be invaluable in guiding further action or withdrawal. This third consideration of course corresponds to getting some information about generalizability – external validity. Safety, possible superiority, and generalizability; three reasons for avoiding the monolithic strategy. The analogy carries over completely to the issue of funding research; a point that Cook stresses in the paper previously cited.

This argument does not dismiss the possibility of doubling the investment in the best option, just not restricting all investment to it. Doubling in the research case would make especially good sense if combined with slight variations in the research personnel and population used. But it still comes further down the list than variations in the primary strategy. Somewhere in between these two major paths to enrichment of a single design approach there is the use of the superbly ingenious list of ways to match the comparison group without using random allocation, a list developed and provided by Cook.

The argument given makes an invincible case for the indefensibility of the present situation in which, according to the extensive testimony from members of the review panels that have talked about it, there is no serious consideration of using non-RCT designs instead of RCTs. That strategy is largely based on bad reasoning about the superiority of what are in fact flawed RCT designs, which even if peerless would be no better than many others and clearly worse in many cases. This bad reasoning is combined with the fallacy of assuming that such superiority, if it did exist, would justify a monolithic strategy.

The present ill-based practice is also too often combined with denial of the existence of the monolithic strategy, sometimes accompanied by a gesture in the direction of regression discontinuity funding. If there is any doubt that an essentially monolithic strategy is de facto in place, it would be easy enough to establish the facts by doing a survey of funding over the past 2 years, using a contractor with a team from both sides. It is certainly long past time for a meta-evaluation of the success of the new emphasis on RCT funding and the absence of any movement towards doing that surely shows a serious lack of interest in finding out the truth about the claims for improvement before proceeding still further with the takeover, especially in the latest area where it has established a beachhead, the evaluation of international aid.

It is important that the reasons against the monolithic strategy apply even, per impossible, the RCTs were superior across the board in the certainty with which they can determine causation. It is an argument designed to be acceptable to both camps.

Cooperation Combined with Competition

It would be unrealistic to suppose that the causal wars will cease in the light of the above treatment of the underlying differences between the competing positions. But it would be good to see some recognition of the very considerable range of cases where both parties can benefit from using the skills of the other. Tom Cook, in the article cited, lists many

such cases, although not with quite the spin I'm putting on them, and I'll sum it up in my way by saying that it seems clear that the effective execution of RCT studies depends very heavily indeed on skills that are highly developed in qualitative researchers and extremely rare in the training of quantitative researchers. The converse position is also clear; there is still a considerable area in qualitative research where the skeptical reflexes of the trained quantitative researcher need to be heeded very carefully, not because their usual dismissive judgment is justified, but because by heeding their concerns, the design can be greatly improved, including its credibility to a wider audience, a worthwhile consideration in itself, and also, often enough, in validity. But let's take a final moment to look at the need for qualitative research skills in managing RCTs. We can begin with the two great threats to the validity of the (already limited) RCT design: differential attrition and cross-contamination. No one denies that some very expensive RCT efforts in the past have been completely brought down by these weaknesses. If these flaws are detected very early, it is sometimes possible to stop them in their tracks, before validity is hopelessly compromised. How can an early-warning system for them be set up?

The answer is almost always through a continual process of interviews, both with groups and face to face, with both students and staff, with parents and with administrators, a program which not only seeks by intelligent and systematic questioning to pick up the warning signs, but also builds trust and cooperation in what is after all a project with potential benefits for all.

Interestingly, there is a double reward from this activity. It not only provides good insurance for the validity of the study, but also vital evidence about the process whereby the causal agent – and any inhibitors of it – operate, which provides key clues to the possibility of generalizations in some dimensions and the improbability of generalizations in other directions, and often strong supportive evidence for the causal connection under investigation. Cook gives a long list of the valuable information that can be picked up by these observers in the source cited.

And who has the training for this kind of observation and interaction? Of course, it is a job description for a qualitative researcher. These are high skills, not often taught as of top importance in quantitative training programs. Cook actually gives as his reason for abjuring the term 'gold standard' for RCT designs the fact that these skills are of great importance, are hard to acquire, and rarely available. The bottom line is that RCTs are really hybrid designs, mixed-method in the sense of having essential quantitative and qualitative components.

So I end on this note. A marriage of the warring parties is not only possible but would provide a win-win solution, with major winning side-effects for those in need around

the world. The pre-nuptial agreement should include: (i) recognition of the place of duties for both parties, along with (ii) funding for non-RCT studies where they are better fitted to task and context than RCTs, with skilled quantitative researchers collaborating to cover both sharpening the design and analyzing the numerical data; plus (iii) at least one collaborative meta-evaluation panel funding proposals from both parties, and (iv) another one evaluating the success of contracts of both kinds. Serious concern with research standards (and human welfare) suggests that we should shortly see some proposals like this and/or signs that such proposals would be funded.

Note on Contributor

Michael Scriven is a professor of psychology at Claremont Graduate University, a Senior Research Associate at the Evaluation Center, Western Michigan University, and Director of Institutional Research at Palo Alto University. He is best known for his contributions to the theory and

practice of evaluation in public policy and the social sciences. He is an editor and co-founder of the *Journal of MultiDisciplinary Evaluation*. He has also contributed to the fields of mathematics, philosophy, psychology, the history and philosophy of science, law, education, computer science, informal logic, cosmology, international philanthropy, and technology studies.

References

- Brinkerhoff RO (2003) *The success case method*. Berrett-Koehler, San Francisco
- Cook TD (2000) A critical appraisal of the case against using experiments to assess school (or community) effects. *Education Next*, Hoover Institute, Stanford
- Cook TD, Campbell DT (1979) *Quasi-experimentation*. Houghton Mifflin, Boston
- Scriven M (1966) Causes, connections and conditions in history. In: Dray W (ed) *Philosophical analysis and history*. Harper and Row, New York, pp 238–264

The Logic of Causal Investigations and the Rhetoric and Pragmatics of Research Planning

22

Melvin M. Mark

Abstract

Must investigations of treatment effects adopt a logic of causal investigation that defaults to the design and application of randomized control trials in education? Does the language of scientific research impel this too for intervention studies? In this brief response to Scriven's chapter, we explore the pragmatics of research planning to identify compounding factors and challenges to such characterizations of 'gold standard' research in education. The prospect is tantalizing: if adjudications of explanatory power are the true benchmark for evaluating educational studies, then a requisite variety in research designs and logics must be entertained, and engaged.

Keywords

RCTs • Evaluation • Quality criteria • Validity • Generalizability

It is both an honour and somewhat foreboding to comment on Michael Scriven's Chap. 21, "The logic of causal investigation." Scriven has made thoughtful, indeed, seminal contributions in more than one field related to his chapter. Nevertheless, one can try to read his chapter with the kind of critical eye with which he scans the landscape of the logic of causal investigations. In my view, his focus is as much or more on key aspects of the contemporary landscape of rhetoric and funding priorities related to research design.

In part, Scriven's chapter is a critique of the language used by some advocates of randomized controlled (or clinical) trials (RCTs). By way of background, the terminology and claims to which Scriven takes exception arose primarily from supporters of a priority for RCTs in the funding of select research streams by the Department of Education's Institute of Education Sciences. In my view, one can appreciate the potential contribution of RCTs and still believe that excessive and inaccurate language was used by some advocates of the IES priority. This includes language that seemed to equate "scientific research"

with randomized trials, as well as other language which seemed to suggest that confident causal inference requires a random assignment study. Viewed from this vantage, Scriven's presentation, including his references to children's learning, plate tectonics, and a hypothetical nonequivalent groups design, is compelling. Language that equates causal inference or scientific research with RCTs should be avoided. Case won.

But how important is winning that case, for the broader understanding of causal inference and for planning of cause-probing research in education and elsewhere? Of limited value, I would argue. Likewise, such a rhetorical victory is not likely to persuade advocates about the relative value of RCTs. Regardless of their rhetoric, those advocates appear concerned about the use of RCTs in circumstances rather different than when a baby's learns of her ability to cause a rattle to make noise. Instead, they appear to be interested in causal claims about treatment effects such as those relevant to, say, making choices about adopting one or another math curriculum, or retaining 'DARE' versus replacing it with a different substance abuse prevention programme, or mandating a certain level of credentialization for day care staff.

Fortunately, Scriven also addresses what he calls "the limited RCT position." Scriven recognizes the narrow victory that comes with defeating excessive rhetoric: "To avoid

M.M. Mark (✉)
Department of Psychology, Penn State University,
University Park, PA, USA
e-mail: m5m@psu.edu

tilting at windmills, it seems we should modify the overgeneralized claims of the more enthusiastic supporters of RCT and allied terminology so as to retain a reasonable position to consider.” (p. 168) The limited RCT position, according to Scriven, involves the use of RCTs “to investigate current (i.e., limited) issues about the effect of typical large-scale interventions in areas such as education, health, and social services.” (p. 168) Scriven does not so specify, but in my view, champions of the “limited RCT position” also assume a multifaceted causal background, with an array of forces other than the treatment that may also affect outcomes of interest (Campbell and colleagues’ lists of internal validity threats are an attempt to catalogue these). For instance, one expects that children (or other treatment recipients) will change over time even in the absence of any treatment effect, and that pre-existing individual differences will affect the outcome. Moreover, natural groupings of individuals into treatment conditions may be confounded with other factors in ways that can create biases in estimates of treatment effects.

Scriven contends that RCTs are not superior, even in the limited RCT position. One reason Scriven gives is that, in educational and most behavioral applications, RCTs typically do not include double blindness (whereby both investigator and research participant are unaware of the participant’s condition). Absent double blindness, expectancy effects including Hawthorne are possible. As a result, Scriven argues, a good alternative method “is not essentially disadvantaged against the RCT; both leave open other explanations of any effects.” (p. 167) Actually, Scriven would not have had to point to the absence of double blindness to make this point. The common use of hypothesis testing statistics in RCTs leaves open another, simpler explanation, that is, Type I error. Regardless, Scriven’s point seems to be that RCTs are not “bulletproof,” that other methods can provide equally compelling evidence about treatment effects, and that judgments about relative merit of methods should be made in the context of specific studies.

Scriven supports this notion, and further argues against the limited RCT position by presenting a hypothetical study of the effect of the HIP instructional technique. In a non-equivalent groups, pretest-posttest quasi-experimental design, morning and afternoon sections of introductory physics serve as treatment and comparison groups. I agree with Scriven that studies other than RCTs can provide reasonably compelling evidence of the effectiveness of interventions such as the new instructional procedure. But at least three challenges seem to apply to Scriven’s general rejection of the limited RCT position.

First, consider the several things that went right in the hypothetical example: equivalent pretest scores, a big treatment effect (with treatment group students showing about one standard deviation more improvement than the comparison group), replication of that big effect across two semesters, the

presence of observers who see no confounds, and no other reported validity threats. If all of these circumstances hold (and if no other plausible validity threats are identified), the study’s results seem credible. But what are the odds, a priori, that all of these will fall into place in practice?

Second, what is the plausibility that a hidden or lurking source of bias exists in the hypothetical study? The classic concern, in the absence of random assignment, would involve some form of selection bias, that is, the possibility that pre-existing differences in the groups exist and are responsible for the observed posttest difference between groups. Selection bias is made less plausible in Scriven’s example by the pretest equivalence between groups and by the replication across semesters despite switching the HIP intervention from the morning to the afternoon session. However, consider this possibility. The most motivated students (most motivated, not most knowledgeable about physics) tend to register first. They also tend to look for courses being taught by professors known on the street as the best. And perhaps one semester the competing favourite professors are mostly in the morning, and the next semester mostly in the afternoon. This scenario could explain what appears to be a treatment effect in the example.

Interestingly, the quasi-experimental design Scriven presents would also appear to be susceptible to an experimenter/instructor expectancy effect. Often in studies such as this, the instructor is a believer in the new instructional technique being tested. Could that translate into subtle forms of teacher expectancy that the observers did not see? This seems at least as plausible as the concern about Hawthorne effects that Scriven uses as a general criticism of RCTs. (After all, if Hawthorne effects were commonplace and potent, wouldn’t more interventions be successful?)

Third, Scriven assumes that only large effects are of interest. He endorses the hypothetical quasi-experimental design “knowing that it’s a net that will catch only big fish, but you don’t want little fish.” His emphasis on large treatment effects in general reduces concerns about the quasi-experimental design, because usually it is less plausible that a validity threat can explain away a larger effect. But is an a priori restriction of interest to “big fish” reasonable, especially in domains in which past efforts suggest the typical fish is not huge? As in the classic case of the early trial of aspirin’s effects in preventing heart attacks, aren’t small effects sometime important?

Taken together, these three challenges may raise the question of how compelling Scriven’s argument is against the limited RCT position. This is especially so when we think of research planning and funding, as opposed to after-the-fact evaluation of individual studies. In the IES priority, for instance, the key consideration would seem to be the expected validity of alternative designs for estimating the effect of educational (or other) interventions, given

reasonable expectations about the likelihood of such factors as selection biases. A related subquestion would involve the ability of review committees (or other interested parties) to predict the presence and magnitude of various internal validity threats. For instance, could a grant review panel, prior to completion of Scriven's hypothetical study, know with confidence that the treatment and comparison groups would be equivalent at the pretest? And would they agree that only a very big treatment effect would be of interest? Alternatively, to what extent is random assignment (or other design features) preferred as a kind of preventative measure, as an admittedly imperfect insurance policy against validity threats that could plausibly appear and weaken a study's conclusions?

In this brief commentary, I raise these questions without attempting a definitive answer. Instead, I turn to what I see as two of the noteworthy strengths of Scriven's chapter. One is his thoughtful discussion of funding priorities, not for individual studies but for portfolios of studies. As he notes, even if RCTs were preferable in general, it would likely be better not to invest all research funding on RCTs. This is a compelling point, perhaps lost on those who apply so-called gold standard rules indiscriminately. Consider external validity, that is, the accuracy of inferences about the generalizability of a finding. Even if RCTs give the most internally valid, unbiased estimates of the effects of a program, external

validity concerns might best be served by mixing study types in the overall research portfolio. If random assignment is feasible only in limited circumstances, then adding more RCTs could easily be less informative than funding an alternative study type. Another noteworthy strength of the chapter is Scriven's concluding section, which deserves your re-reading.

Were these commentaries longer, it would be easy to pick various nits. For instance, the question of generalizability merits additional attention. In a longer commentary, it would also be possible to applaud various additional points Scriven makes, such as his reference to the "general elimination methodology." That said, it is time for you to re-read Scriven's conclusion if not the entire chapter.

Note on Contributor

Mel Mark is Professor of Psychology at Penn State University. Mel Mark's interests include the theory, methodology, practice and profession of program and policy evaluation. A past president of the American Evaluation Association, he has also served as Editor of the American Journal of Evaluation where he is now Editor Emeritus. He researches applications of recent models of affect to prevention and to risk-taking behaviors, and the appropriate use of social science research in social policy, particularly in the context of program evaluation.

Marianna Papastephanou

Abstract

Postmodernist criticisms of emancipatory Critical Theory challenge the ongoing relevance and pertinence of the version of educational action research that has been promoted by Wilfred Carr and Stephen Kemmis. Their perspective on ‘theory and practice’, in particular, attracts John Elliott’s critical attention and his charge of their Habermasian framework with rationalism and finalism. In this chapter, I present the relevant arguments and I discuss some of those criticisms with an eye to issues of emancipation and context-transcendence. In so doing, I employ insights from recent debates between various versions of Frankfurt School Critical Theory (from Apel and Habermas down to Cooke), on the one hand, and adherents to a widely conceived postmodernism (theorists such as Butler, Laclau, Rorty), on the other. My position is that immanence and transcendence as compatible and equally necessary components of a critical educational-theoretical framework are crucial for the preservation of the emancipatory ideal and motivational force of action research today.

Keywords

Social science • Values • Critique • Context • Emancipation

Introduction

How might educational research and philosophy guide and critique educational values and action – and vice versa? How do practitioners draw on research in their reasoning, practice and inquiries, in ways that won’t become calculative, instrumentalist, or self-serving, and will support the transformative, ethical and defensible? Faced with such challenges, in one of their most recent texts on educational action research, Wilfred Carr and Stephen Kemmis (2005) admit that some older philosophical ideas surrounding the theory versus practice opposition in education should be revisited in the light of postmodernist criticisms of emancipatory Critical Theory. However, their version of educational action research also attracts John Elliott’s critical

attention and his charge of their holding to a Habermasian framework with a ‘theory versus practice’ dualism.

In this chapter, I present the arguments that have been put forward along such lines and I sketch briefly the philosophical notions that underpin them that have lately appeared flawed. To discuss emancipation and context-transcendence as focal points of tensions regarding the possibility of a critical social science, a critical educational science, and a critical, reflective and transformative educational action research, I employ insights from recent debates between various versions of Frankfurt School Critical Theory (from Apel and Habermas down to Cooke) and adherents to a widely conceived postmodernism (theorists such as Butler, Laclau, and Rorty). My position is that context-specific and context-transcending efforts as compatible and equally necessary components of a critical educational-theoretical framework and practice are crucial to educational research: for the preservation of the emancipatory ideal in this field and for the viability and motivational force of today’s researches.

M. Papastephanou (✉)
Department of Education, University of Cyprus, Nicosia, Cyprus
e-mail: edmari@ucy.ac.cy

Educational Action Research and the Ideal of a Critical Social Science

Educational action research has developed as a form of professional redirection of teachers toward a more substantive and decisive engagement and intervention in theoretical academic issues of schooling. The aim has not been that of replacing the academic researcher with the practitioner; the aim has rather been the bridging of their gap, the elevation of the teacher to the status of the researcher who influences or handles various matters of her school and of learning more generally and who grounds such interventions in evidence that derives from practice itself. The underlying idea, Aristotelian in its origin, is that practitioners not just employ but also produce theory through a reflective examination of their practice, thus simultaneously achieving progress in their practice itself (Carr 2004, p. 63). By researching in their own professional province, teachers question the terms and conditions that seem to determine practice and, through the effects of such questioning, they realize their educational visions (Elliott 2003, pp. 171–2). What is combated is a stagnant and passive relation of theory and practice where the former appears disconnected from real terrains of action and the latter is treated as a reified and standardized, unreflective set of tasks and duties.

By revisiting the theory versus practice binary, educational action research touches upon a problem that has haunted education from antiquity to the present. Already in Plato's *Laches* a major pedagogical issue is the coordination of words and deeds, binding thought and action in a relation of fidelity. Deeds must be true to ideas; ideas must be true to the practical intent that makes life and thought meaningful. Life must be lived in such a way that words and deeds are in a harmonious interplay. The way in which one lives her life is decisive for the force of her theoretical expositions: one is judged in virtue of the harmony of words and deeds that she has attained. For *Laches*, 'when I hear discussing virtue or any kind of wisdom one who is truly a man and worthy of his argument, I am exceedingly delighted; I take the speaker and his speech together, and observe how they sort and harmonize with each other. Such a man [...] has tuned himself with the fairest harmony, not that of a lyre or other entertaining instrument, but has made a true concord of his own life between his words and deeds. [...] [B]ut a man who shows the opposite character gives me pain, and the better he seems to speak, the more I am pained' [Plato, p. 188, D, E (Lamb 1977)].

Ever since, the harmonious interplay has, in its several aspects, been sought, formulated and reformulated, abandoned or revived. Education has often been disentangled from it and relegated to the sphere of the practico-inert (to use a Sartrean term), where theory becomes recipe and

practice becomes standardized and repetitive implementation (Papastephanou 2009). One of the major effects of the modern institutionalization of education has been the dissemination of an equation of education with a system rather than a practice. As a system, it had to be 'organized, managed and controlled' so as to become 'responsive to the political and economic demands of the modern industrial state' (Carr 2004, p. 64). This further leads to a lack of critical development and a reluctance, perhaps even an aversion, to the task of reflecting on the ends of education themselves. Not that there are no ends; but these seem to be external to education, servile to systemic societal imperatives, unchallenged by theory and beyond any reconsideration.

This juncture explains, to some extent, the urgency and relevance of the formation of an educational research deriving from Critical Theory and the idea of a critical social science. From the early Frankfurt School's critical interrogation of formal and informal education (Adorno 1972) and of dominant Occidental understandings of rationality (Adorno and Horkheimer 1979) down to Habermas's critique of the colonization of the lifeworld by the systems of administration and economy (Habermas 1989), the promise was that of the advent of a theoretical commitment to critique and change. Educational action research was to give practical expression to such a critical educational science (Carr and Kemmis 2005, p. 350). Of course, that was not the only theoretical influence. Dewey's pragmatism had already been an inexhaustible source of critical insights addressing problematic situations (Papastephanou 2006). However, where the two approaches differ significantly is on the stronger cognitivist and deontological grounds of the former's conception of critique beyond problem-solving and the stronger utilitarian connotations of the latter's conception of truth, leading to divergent treatments of the theory – practice relation and of the meaning of a critical social science.

In contexts where the pragmatist influence is more strongly felt, the 'critical' component of 'critical social science' is downplayed, at least in its more philosophical meaning that has a moral and epistemological independence from utility, practical testing and public agreement (Papastephanou 2006, p. 188). Carr and Kemmis's (1986) ideal of a critical social science places more emphasis on the critical in its Frankfurt School sense than on its pragmatist counterpart. The most updated account of the Frankfurt School conception of socio-scientific criticality can, to my knowledge, be found in Maeve Cooke's definition of critical social theory as 'any mode of ethically oriented reflection that looks critically at social arrangements from the point of view of the obstacles they pose for individual human flourishing' (2006, p. 7). The term 'ethical' is used in a general sense to refer to 'modes of thinking and acting that are guided by a concern for the good' (ibid). In turn, the concern for the good is construed

as ‘a concern for a transcendent object that always exceeds its particular representations’ (ibid.). This is precisely where the Frankfurt School breaks with pragmatism: for the latter, the concern for the good is always immanent, context-specific and with no surplus of truth going beyond socially current epistemic warrant. By contrast, even for the newest Frankfurt School thinking, critical social theories are allowed ‘to regard the prevailing perceptions of needs and interests as possibly faulty’, because the critical socio-theoretical guiding ideas of the good society differ from ‘those dominant in the criticized social order’. Hence, ‘insofar as the inhabitants of the social order in question are guided by faulty views of the good society, they will hold correspondingly faulty views of human flourishing in general and of their own needs and interests in particular’. What Cooke recommends in such cases is a cognitive transformation that is prior to the transformation of prevailing social arrangements (2006, p. 10).

However, from the Frankfurt School critical theoretical perspective, cognitive transformation is not ‘a good in itself but a means of achieving one’. The crucial concept is not ‘cognitive transformation but beneficial cognitive transformation: what is sought is not just a change in the way we see things but a shift in perception that constitutes a change for the better’ (Cooke 2006, p. 13). Therefore, visions and representations of the good life are presupposed by any theory aspiring to maintaining its critical edge. We may push this idea even further: because what is sought is not just any change, but change for the better, criteriology and debate about what counts as better *in advance* and a solid concept of truth cannot be sidestepped through recourses and concessions to a (neo)pragmatist trust in procedural populist testing of values solely on grounds of outcomes. This does not mean, of course, that certain ideas are removed from public interrogation. But it means that without a conception of the good as corresponding to some truths and a notion of truth as transcendence of social currency (Papastephanou 2006), there is no way of drawing this very distinction between beneficial and non-beneficial change. Criteria of truth are inserted as soon as we ask: beneficial to whom? What is benefit? Who and what determines human need, interest and desire and other such notions that underpin conceptions of benefit?

New Challenges

Despite its enduring influence and its academic institutionalization, educational action research as a mode of critical social science has lately confronted a twofold challenge, on the empirical and on the theoretical plane. Carr and Kemmis (2005) describe the *empirical* challenge that action research

confronted in the years since the publication of their influential book (1986) as a profound undermining of the teachers’ professional autonomy. ‘The accountability movement of the 1980s and the massive re-regulation and hyper-rationalisation of schooling in the 1990s have been the two basic vectors of this challenge to the exercise of autonomous professional judgement. ‘Although many advocacies for action and practitioner research, including Donald Schön’s notion of the “reflective practitioner” have continued to encourage teachers to develop their professional practice, the social and political conditions of work in the profession are substantially counter to this trend’ (Carr and Kemmis 2005, p. 350). The new hindrances to educational autonomy have, according to Carr and Kemmis, had a troubling and increasingly obvious corollary. As action research ‘became an institutionalised model of in-service teacher education, so some forms of action research have become detached from any emancipatory aspirations and transformed into little more than a research method that could be readily assimilated to and accommodated within the broader requirements of the orthodox research paradigms we had intended to replace’ (Carr and Kemmis 2005, p. 351). Thus action research itself has fallen victim to the theory versus practice dualism both in the sense of being pushed to an either/or drastic choice between an estranged academic discourse and the automation of daily professionalism as well as in the sense of having to come to terms with an escalating reification of thinking and acting where words part company with deeds.

The *theoretical* challenge has been felt in educational action research contexts as an epistemological and ethico-political trauma caused by the blanket critique of the cherished ideals of modernity that had nourished action research normatively in the first place. ‘With the rise of that complex configuration now known as “postmodernism”, the project of modernity is deemed by some to have outlived its usefulness and the Enlightenment meta-narrative of human emancipation that underwrote the argument of *Becoming Critical* is regarded as obsolete’ (Carr and Kemmis 2005, p. 353).

In what follows, I shall deal only with this theoretical challenge and I shall explore the new philosophical light that can be shed on the basic notions that underlie the theory – practice opposition beyond the modernism versus post-modernism divide. First, I shall broach the issue through reference to Elliott’s critique of the received philosophical underpinnings of action research because this move will make the theoretical stakes of action research stand out better. A discussion of those of Elliott’s arguments that concretize the theoretical postmodern challenge in the educational action research context will prepare the ground for my approach to the challenge itself.

Neo-pragmatist Objections to the Habermas-Inspired Action Research

Carr and Kemmis retain from the first edition of their book as still viable and defensible ‘the insistence that educational practice can only be made intelligible by reference to the Aristotelian concepts of *praxis* – morally informed action aimed at achieving some ethical “good” – and *phronesis* – the mode of practical reasoning appropriate to deciding what, in any particular concrete situation would constitute an appropriate expression of this “good”’ (Carr and Kemmis 2005, p. 352). They argue that such a conception of *praxis* is better served by a philosophical framework that makes use of the epistemological ground that the Habermasian notion of rationality has covered.

By contrast, for Elliott, Habermas’s communicative rationality is part of the problem that action research confronts rather than its solution. What is implied in Elliott’s critique is that Habermasian theory suffers from the authoritarian finalism that is so often chastised by postmodern critics of the legitimating force that modernity attributed to reason. ‘For Habermas, undistorted, free and open practical discourse that is aimed at achieving an unforced consensus presupposes that participants are an avant-garde who have “completed the processes of enlightenment”’ (Elliott 2005, p. 361). It is not clear in Elliott’s text which Habermasian work is the source of the latter phrase, but, at least, from the middle period of Habermas’s writings and on, nothing is presented as completed or known in advance, save the normative presuppositions of argumentation. Even those have, through various Habermasian concessions to anti-foundationalism, been put forward in a grammatical¹ rather than in a transcendental sense (Habermas 1991, pp. 231–3), and that has precisely been one of his points of contention with K.-O. Apel (Papastephanou 1997, p. 50). Moreover, for Habermas and Apel, discursive procedures are will- and opinion-formative; they are not the kind of argumentative negotiation that leaves prior assumptions unchanged. If the completion of the processes of enlightenment meant that the actors knew the valid arguments prior to the actual dialogue, the idea of an opinion-formative dialogue, perhaps the idea of dialogue itself, would be expendable. If the agents were an avant-garde who had completed the processes of enlightenment, then the subjects of dialogue would be a limited and ‘enlightened’ élite, and not *all* those affected by a norm, as they are for the Habermas of the 1990s on (for example,

Habermas 1992). That they should be bound by the minimum requirements for a dialogue to be possible, i.e. a sense of co-responsibility and dialogical equality is hardly an avant-gardish expectation. Equality and responsibility are ‘obligations’ and ‘promises’ we implicitly make to others from the very moment we enter a practical discourse with them (Papastephanou 1997, p. 47).

Yet, modernist finalism or closure is not Elliott’s main objection to Habermas and, consequently, to Carr and Kemmis. More importantly, he criticizes them for the fact that, although they aspire to provide a critical theory whose practical intent is the emancipation of the oppressed, they fail to provide ‘some understanding of how the material conditions for the organization of action through ideologically undistorted practical discourse might be concretely realised and objectively instituted in our social and political institutions’ (Elliott 2005, p. 361). Thus he concludes that the link between theory and practice is not achieved.

There are arguments for and against Elliott’s criticism. It is true that *Ideologiekritik* often appears to be an empty letter, inoperative and self-exonerating. Elliott’s remark proves right in cases where a newly acquired knowledge or critical position about an issue (especially a political one) often leads many people to a self-congratulation that appeases discontent and domesticates critique. It offers no guidance to appropriate action and it does not translate into energetic intervention in concrete matters. Arguments against Elliott’s position concern the epistemological demarcation of a critical theory’s province. The task of a critical theory aiming to determine the relation of theory and practice is primarily a cognitive wager; it does not guarantee the successful passage to actual change. First and foremost, it operates at a justificatory level. If it has any motivational significance or *material* consequence (and it sometimes has), this is derivative precisely from the force of its felicitous description of how theory *should* relate to practice. This is by no means a simply therapeutic feat, as Elliott states (2005, p. 362), if by the latter one understands something that makes you feel better. It is more than therapeutic because it leads to a cognitive transformation that, without being a sufficient condition for appropriate action, it is a necessary one.

An example: when the issue of a political conflict comes up in classroom discussion, knowing all the facts and details about it and having endorsed the appropriate moral principles does not automatically lead the teacher or the students to adopting the right stance or theorizing the steps people should take to dealing out justice. Yet, not knowing the facts and details of the issue and being unclear about the moral principles at stake deprives them from the means to form an opinion about the issue at all, unless we suppose a kind of ultra-metaphysical position that a “gut feeling” leads them to truth either by actively participating in the lives of

¹ That is, as presuppositions of testing validity, the presuppositions of argumentative discourse are non-circumventible, but, as grammatical sentences, they are subject to empirical testing themselves and are in principle themselves open to revision.

those involved in the conflict or by listening to disparate narratives here and there.²

Now, to argue that a fair, accurate and informative, theoretical account of the stakes of a conflict is itself to be blamed for the agent's failure to swing into appropriate action is like blaming Newton for one's fall from the fifth floor, for failing supposedly to secure that humanity will always deal successfully with the law of gravity. A convincing reworking of the theory–practice relation is not one that expects everything from theory to the point of subjugating practice and performing its tasks. Various theories should be critiqued and contrasted to one another regarding their descriptive validity and normative force, not regarding their successfulness at inspiring and urging people to action – not because the latter is not legitimate or desirable but rather because it does not depend on the theory itself and does not fall within its immediate province. If the opposite were the case, then we should regard as the best theory the one that backed Nazism, for it managed to persuade and urge to action in the quickest and most sweeping way very many people and acquired 'practical' significance at once.

I believe that my difference with Elliott on this boils down to a difference in starting point rather than endpoint. When he writes that 'therapeutic critiques that promote critical self-reflection do not necessarily translate into empowering people to take action for the sake of an ideal' (2005, p. 362), the question that emerges is: can they automatically translate into empowerment and is it their fault when they do not? With an example: if one has been led through critique – therapeutic or not – to hold aggressive wars morally repugnant but fails to activate this principle when her country is involved and comes up with all kinds of rationalization for this, is the principle itself and the critique that led to its formation to be blamed? Is the principle itself thereby falsified? For her, what is needed is an immanent critique, from within her own admissions; for a person who does not share the principle of avoiding aggressive wars what is needed is a transcendent critique, that is, from without. The argumentative distance that needs to be covered is usually longer in the second case. It is fair enough to consider some routes to critical self-reflection anaemic, lacking compelling motivational force and uninspiring. But can critique be presented as unworthy or not valid because it produced no effect in a given appropriate context? Doing the latter entails that one's absolutized *starting point* is a utilitarian framework of gains and losses where ideas are judged not on grounds of validity, deontological desirability and acceptability, but on grounds of a risk-averse preoccupation

with utility,³ applicability and immediate results. Issues of justification are different from issues of motivation and performativity, and they should be judged separately.

Then again, in agreement with Elliott, as I construe his concerns beyond what is stated in his text, philosophy of education should start paying attention to its inspiring possibilities and abandon the elitist excuse that, when a message is not heard, the blame is entirely on the deaf ears. Having said that, becoming critical may not be 'enough to become empowered as a change agent' (Elliott 2005, p. 362), but it is a first step, and a 'non-circumventible' (Apel's term, see Papastephanou 1997) one for that matter. It is also an ongoing necessity that staves off the danger of becoming a change agent for the worse and not for the better. It is true that, for empowerment, action 'requires further conditions to apply, such as having the "power motivation" and capabilities (cognitive abilities and dispositions) necessary for exercising agency in a situation' (Elliott 2005, p. 362). But the question that arises here again is whether the lack of such conditions should burden the theoretical proposals of a critical social science. Besides, for such conditions to appear and operate, the whole transvaluation of society is needed and not just the procedural guidance of a book with practical intent (such as Carr and Kemmis's), even if such guidance were the optimal. For there we encounter the intractable problem of how education is implicated in conservative reproductive systemic relations as well as what I have described in the beginning as the empirical challenge of contemporary action research.

Despite the pertinence of many of his criticisms, Elliott seems to presuppose criticality as an accomplished reality or a widely accepted and uncontested matter of fact that needs no elaboration and debate, and the crucial matter now is to formulate prescriptions of action. To be motivated to do something you consider good and to have the capabilities to do it at the right time and place does not absolve you from the task of scrutinizing what you consider good and why. The issue of the ends of action persists and demands a constant critical vigilance on the part of the practitioner. For example, one may assume that, as a critical thinker immersed in the dominant globalist discourse, a teacher entertains the idea that, to be truly cosmopolitan, all you need is to cross geographical borders. Suppose also that this teacher is motivated to organize his practice along this idea, has the capabilities for exercising agency in the appropriate situation, and plans his classroom research around such an axis. Now, if he is not vigilant enough to seek the approaches on cosmopolitanism that reconsider and problematize its

² Of course, such narratives are an indispensable part of an informed account of the issue but they in no way exhaust a more systematic and methodical approach.

³ Such is the case of Rorty's neo-pragmatism, where, in Rorty's words, 'the question should always be "what use is it" rather than "is it real?"' (1993, p. 445).

conventional ‘truths’, approaches that are a step ahead, so to speak, this practitioner will carry on to direct his efforts to the cultivation of what he still considers good and worth pursuing but some sound philosophical argumentation has found implausible. Theoretical vigilance is not suspension of judgement and of action; it is methodical and consistent research in the body of work that is relevant to a specific topic but as yet ‘unexploited’ in actual contexts or non-sedimented as socially current. Empowerment, in turn, is not a good on its own, irrespective of what this newly acquired power is for. The motivational dimension is valuable, but only when it emanates from the right balance of the cognitive, the ethical and the affective.

The Sciences, the Better, the We and the Values of Neo-pragmatism

To summarize, a crucial theoretical difference in major tendencies and directions of action research now in the Anglophone context is the tradition in which they are grounded. Elliott ascribes what he sees as serious design faults of Carr and Kemmis’s approach to an exaggerated dependence on the work of Habermas and other critical theorists (Elliott 2005, p. 364). His sympathies seem to be with the postmodern questioning of the ideals of modernity and his criticisms reflect the main points of the theoretical challenge that postmodernism presents for Critical Theory-inspired action research. The redemptive force of the critique of ideology is charged with finalism, the apriorism of criticality is seen as therapeutic-qua-ineffective, and the emancipatory aim of critical reflection is viewed as lacking empowering potential and perpetuating the theory versus practice dichotomy.

It is clear that Elliott’s preference is a neo-pragmatic, Rortian line of thought (2005, p. 370). In his own words,

Rorty has suggested that inquiry is simply a tool at our disposal *to make life better*. Sometimes *we will want it* shaped to make technological progress while at other times *we will want* to shape it to make other kinds of progress. Rorty provides an example of inquiry directed to achieving a coordinated pattern of political behaviour in the form of a proper balance of powers between different branches of government. Such inquiry is no less scientific than one that investigates the microstructure of material bodies to make technological progress. From his point of view and mine (that of pragmatism) there is “no sharp break” between *natural and social science, or between areas of our culture generally*. They are all part of an endeavour *to make life better*. (Elliott 2005, pp. 370–1; emphasis mine)

The idea that there is no sharp break between the sciences and areas of our culture and that they are all part of an endeavour to make life better is generally apposite, but it can be misleading here: that no field of endeavour is entitled to reign over the others (consider the very many criticisms of

the Kantian proclamation of philosophy ‘the queen of the sciences’) does not entail levelling sciences as to their relation to the meaning of the human good. The approximation of the meaning of making life better, I have argued elsewhere (Papastephanou 2006), is, perhaps not exclusively but surely mainly, the burden of a thought that has as its task to jump ahead, in the sense of problematizing precisely what for others remains unproblematic. Philosophy treats the meaning of ‘making life better’ in a way that breaks sharply from other approximations, because it approaches it in a non-statistical, in a more singular, fashion. *Contra* the major tendency in pragmatist theorizations to see a more ambitious philosophy as dispensable (Rorty 1993, p. 445) because its task is supposedly that of all other scientific theories democratically competing for people’s attention, philosophy has the unique prerogative to speak for the unique. One of the reasons for which human sciences cannot replace philosophy is, according to Alain Badiou, the fact that human sciences have become the home of the statistical sciences. They are:

themselves caught up in the circulation of meaning and its polyvalence, because they measure rates of circulation. That is their purpose. At base they are in the service of polls, election predictions, demographic averages, epidemiological rates, tastes and distastes, and all that certainly makes for interesting labour. But this statistical and numerical information has nothing to do with what humanity, nor what each absolutely singular being, is about. [...] Philosophy is thus required by the world to be a philosophy of singularity, to be capable of pronouncing and thinking the singular, which is precisely what the general apparatus of human sciences does not have as its vocation.

(Badiou 2005, pp. 39–40)

To return to the approving account of Rorty by Elliott in the previous citation, the arbitrary voluntarism of ‘we will want it’ and ‘to make life better’ is as much a problem as the levelling of areas of culture. Better for whom and for what? This would be another pertinent moment for bringing up again the Nazism example, but let us single out a less blatant case that cannot attract the protest that one of the darkest and rarest (?) events of human history (i.e. the exception) should not be the yardstick for judging evolving continuity (i.e. the rule). Inquiry has, amongst other things, been used to make the life of the colonizer better and it arguably has done so for generations ahead, even long after colonialism had ceased to be operative. But it has made life unbearable and unmanageable for some others, again, even after many years since the end of colonialism had passed. That colonialism collapsed from within at a later historical point in the course of actual historical change is no much consolation for those who suffered irreversible damage. One might say that for failures to do what is right, people learn by the consequences after the event, so it is practice that reveals the shortcomings of wrong ideas and causes change in direction. But that is a retroactive – albeit valuable – occurrence that reinforces instead of

annulling the proactive qualities of critical thinking. The latter protects from the belatedness of practical realization, the *contre-temps* of being no longer able to undo the consequences of your previous ideological commitments translated into actions. Further, modification in the light of experience (Elliott 2005, p. 369) means to me that, if something does not present an empirical difficulty, a problem that ‘cries out’ for a solution, then, things can carry on forever unaltered and unchallenged. Thus, it is precisely because of this ‘better’ and the arbitrary, free-floating meaning it acquires when it is not restricted by supra-individual and supra-cultural criteria that inquiry cannot simply be a tool for improvement but rather a constant exercise in examining life and the good it aspires to by considering immanent and transcendent discourse. And who is this ‘we’ that has inquiry at its [‘our’] disposal and uses it at will?

For Rorty, ‘us’ can, at our best (i.e. ‘us as we should like to be’), only mean ‘us educated, sophisticated, tolerant, wet liberals, the people who are always willing to hear the other side, to think out all the implications, etc.’ (Rorty 1993, pp. 451–2). Apart from the fact that one could arguably object that each of the adjectives constitutes an elitist myth in itself, the idea of the wet liberals described as always willing to hear the other side seems like a half-truth. Yes, wet liberals may be willing to hear the other side; but only to shrug off their shoulders indifferently reasserting that each side has its own rationale and right to state its opinion or ‘tell its own story’ (as a fashionable pragmatist cliché has it), but there is nothing context-transcending to invoke so as to take a side and decide the truth of the case. They lack supra-subjective criteria, strength and willingness to take forceful action for changing their priorities to something more than just mediocre and minor piecemeal engineering, in a world where unnoticed major and rapid change to the worse, especially environmentally, makes the idea of slow progress through practical trial and error much more than just a practical joke. Nourished with the self-recuperative solace – common to capitalism and its theoretical underpinnings – that a historical stage has been achieved, where auto-correction and forward-looking adjustment makes radical theoretical critique redundant, this ‘we’ has brought the world to the brink of disaster without losing its unwarranted faith in itself. If that is our best, then, it is too little.

Elliott’s complaint about the critical theoretical version of action research is that, for it, ‘practical discourse only becomes “critical” when its participants have been enlightened by the application of critical theorems constructed through theoretical discourse’ (2005 p. 367). If what is implied here is the assumption of many practitioners that theoretical discourse is a unified field from which they can draw ready-made ideas that are automatically transferable and applicable to various contexts,

then Elliott is right to complain. He would even be right to claim that this is the most uncritical (and detrimental to reflection) way to treat both theory and practice. Philosophy of education as an academic subject has much to strive for in the direction of undoing this assumption. Then again, teachers should not be expected to be specialized enough to produce and research in theoretical matters themselves. But they should be able to search in philosophy, find ideas, compare them, explore current and older debates and gain insight through the challenge to consolidated views that good theoretical debates present. Critical thought is heightened through such a relation to theoretical discourse, not transferred directly as an object obtained by theory as such and applied invariably.

Elliott’s aim has been to ‘develop concrete strategies for linking research to practice in a form that enabled teachers to effect change in their classrooms in the light of their educational values’ (2005, p. 369). Their educational values: each of these words presents a serious difficulty. Teachers’ values are not simply educational. They mirror, presuppose and sustain more general societal values. They are not quite theirs because they are not solipsistically constructed. They are in a more complex relation to the self and its various others (society, individuals, institutions, etc.). An additional problem that must be dealt with caution concerns the fact that the feeling that an idea is one’s own often functions as an excuse for the idea not being revised. Ownership of ideas is often attributed to a social agent for populist reasons, in order for the one who does so to claim for herself the credit of a democratic thinker who does not patronize people depriving them from their capacity to have their own mind. But, like reasons,⁴ values too are not *owned* by the subject but *owed* to the others: they bind us in a relation of commitment and responsibility. They do not simply protect their ‘owner’ as a free, autonomous being and they do not protect her from the critical judgment of others. And whether they are values in the sense of being worthwhile and deserve one’s commitment and a wider educational hegemony is also not automatically settled. Educational values must be judged as to the way they relate to emancipation and images of human perfectibility (in need of public interrogation) and the way in which they could be connected to context-transcending critique and philosophy. Thus, we are again led back to the initial problem: are emancipation and transcendent critique still meaningful enough to inform educational values as I have just claimed?

⁴ Here I am adapting Cooke’s reference (2006, p. 138ff) to Jean Cohen’s discussion of possessive individualism with regard to reasons so as to make it relevant to my discussion of values.

Meeting the Theoretical Challenge

Carr and Kemmis explain that in responding to some postmodernist challenges, they would adopt a Habermasian line, ‘attempting to show which of the claims against an emancipatory interest are misguided, exaggerated or otherwise contradictory’. They would aim to show

that there is still sense in the notion of “emancipation”, socially, politically, culturally and in terms of rationality itself – that critical rationality, while never complete and fulfilled, and while always reflexively open to new perspectives and corrections, still offers a way for people to think themselves out of their presuppositions, taken-for-granted assumptions, habits of mind and existing expectations about how the world is and should be ordered.

(Carr and Kemmis 2005, p. 354)

I agree with Carr and Kemmis’s response and here I shall back it up philosophically in a broader fashion. For, not only Habermas, whose views are often mistakenly assigned exclusively to modernism, while all their affinities with postmodernism are silenced,⁵ but also a whole line of thought is still dedicated to the defence of an emancipatory criticality that disrupts taken-for-granted assumptions and habits of mind. Context-transcendence as the ideality of human perfectibility is still theoretically supported in multiple ways. Drawing from sources as diverse as the Socratic *elenchos* and Hannah Arendt’s (1989) critique of everyday normalcy, this line of thought urges us to question sweeping conventional truths that are solidified; interestingly, one such truth is the fashionable idea that the postmodern attack on emancipation and rationality is wholesale, promoting the assumption that all theories within postmodernism are at one when such attack is concerned.

In fact, I propose that the emancipatory ideal and concomitant imageries of human perfectibility, i.e. arguments and desire for change along dictates of context-transcending critique and reason, can be defended through a twofold strategy that I can only indicate here. On the one hand, applying a transcendent critique (that is, from the outset) to postmodernism, we can indicate that (a) postmodernist concordance on the obsolescence of rational legitimacy is itself now being questioned and even charged by some with obsolescence. Then, (b) it can be shown that postmodernist theories are not always dismissive of the legitimating power of reason, and postmodernism itself is not univocal on the issue of criticality and emancipation.

⁵ For instance, the convergence between Habermasian ideas and postmodernism is stated and convincingly argued by Peter Dews in his *Logics of Disintegration* (1987).

A Critique of Postmodernism from the Outset

There are new tendencies in philosophy that operate outside the general theoretical premises of postmodernism (without being necessarily at odds with some of them) and rehabilitate context-transcendence as that which interrupts the automatism of everyday life. Here I shall limit my exposition solely to indicative gleanings from those tendencies for reasons of space. One such tendency revolves around a renewed interest in Arendt’s arguments about the infiltration of practice and criticality with statistics and calculative reason and about a possible overcoming of this reification through a conception of action as ‘miraculous’ and ‘unexpected’ (1989 p. 246), that is, as having a transcendent quality. In terms that are far more polemical to postmodernism, Badiou retrieves theories (e.g. Platonism) that have been totally dismissed by postmodern orthodoxy, highlights the problems of the ‘end of philosophy’ discourse and attacks the arrogance of the critics of meta-narratives (Badiou 1999, pp. 27ff). ‘It is never really modest to declare an “end”, a completion, a radical impasse. The announcement of the “End of the Grand Narratives” is as immodest as the Grand narrative itself, the certainty of the “end of metaphysics” proceeds within the metaphysical element of certainty’ (Badiou 1999, p. 31).⁶

Within the Anglo-American line of thought that brings post-analytic philosophy in constructive dialogue with the continental trends, we encounter the return of several versions of context-transcendence. For Robert Brandom, validity obtains its necessary transcendence of mere utility or social acceptability from the representational character of concepts; that is, the character that makes concepts answerable to what actually is the case in the extra-linguistic world (Brandom 1994, pp. 594–595). For Christopher Norris, neither emancipation nor the critique of ideology loses its significance, when metaphysical pretensions to closure and dogmatic transcendence are questioned. The notion of ideology can be understood in a non-absolutist way, as equivalent to Spinoza’s ‘knowledge of imagination’, i.e. ‘the kind of “natural” or pre-reflective attitude that accepts what is given in a commonsense way, and finds no reason to question or to criticize the grounds of naïve sense-certainty’ (Norris 1991, p. 35). Critique of ideology, then, is the consistent and reflective questioning of established habits of thought and conventional wisdom.

⁶ Parenthetically, the revival of older paradigms through the work of Badiou on truth and redemptive politics, a work that has not been discussed in educational action research contexts yet, is capable of rejuvenating educational theory in unprecedented ways.

Of course, there are many other instances, apart from those specified here, that substantiate the argument of this comeback of transcendence against the postmodern vogue; needless to say, more traditionally grounded defences of truth, emancipation, and critique of ideology have also continued unabated. But what is more important is the reason for the comeback; the postmodern emphasis on context-specificity, absence of criteriology and blanket critique of modernity has been seen as leading to very negative theoretical implications. As Cooke succinctly puts it, ‘in the end we seem to be left with a choice between authoritarianism, decisionism, or conventionalism: either some authority tells us whether propositions are valid, or we decide ourselves on contingent grounds, or we appeal to the procedures for determining validity, or to the standards of validity that happen to be already socially established’ (2006, p. 174).

A Critique of Postmodernism from Within

Despite the widely-held view to the opposite, postmodernism is in no way uniform on the issue of emancipation (Dews 1987). As a broad framework of thought, postmodernism comprises figures as diverse as Rorty, who rejects emancipation because there is no humanity in chains (see Papastephanou 2000, p. 401) and Derrida, who defends emancipation because there is nothing less outdated than the emancipatory ideal (Papastephanou 2000, p. 413). Or, other thinkers defend emancipation but have an ambivalent relation to its connection to criticality. I will explain this latter possibility through some brief reference to Judith Butler and Ernesto Laclau. Applying an immanent critique to their ideas, we can show that the very same theorists who have largely endorsed the postmodernist antipathy for context-transcending truth are bound to invoke it when they commit themselves to some implicit idea of the good.

Before moving on, it has first to be explained that even when some theorists diverge extremely on the issue of emancipation and rational criticality and are largely associated with the opposite theses of the modernism – postmodernism divide, things are not as neat and clear-cut as they are often presented to be. This is important because it has a bearing on the supposed rigid demarcation of camps that appears to determine the philosophical understanding of some educational theorists today.⁷ To them, the Frankfurt School is here, neo-pragmatism is there. However, in reality, Apel, Habermas (and the newer generation of thinkers

associated with the Frankfurt School such as Axel Honneth, Albrecht Wellmer, and Nancy Fraser) and many others are committed as much as Rorty to ‘an idea of agency in which argumentative reasoning is a core component’ (Cooke 2006, p. 75). Where they differ, and do so in decisive ways, is in the position they occupy in the line of thought that extends from the context-transcendence of universalism or even post-metaphysical foundationalism to the absolute immanence of radical contextualism. Thus, when other thinkers such as Butler, for instance, reject the argumentative model, they are on this as distant from Rorty, who belongs, at first sight, in the same camp with them, as they are from the Frankfurt School, which is typically treated as the obvious polemical opponent.

As I described in the beginning of this section, we may have another possible treatment of emancipation, one that accepts it as a goal but problematizes its connection to discursive criticality. Butler (2000, pp. 37–41) dismisses the argumentation model of critical social theory that assumes universal presuppositions of linguistically mediated interaction as well as any argumentation model that would favour explicitly or implicitly the stable capacities of humanity either on grounds of the commonality of human nature or on grounds of accumulated human experience and progress. Evidently, as I have said, this affects equally the Habermasian version of the argumentation model that is based on a procedural consensus theory of truth and the Rortian model of conversation that relies on social immanence, i.e. a context-specific and ethnocentric distinction between persuasion and force (Papastephanou 2000). Butler’s preferred mode of critical social theory is that of performativity. Performativity as somatic expression or more generally non-argumentative, non-verbal social intervention and creative re-enactment of human experience undoes the closure that is effected, according to Butler, every time the variable and revisable nature of historicity is occluded by rational order. Yet, Butler’s theory is by no means against any criteriology that would decide in context-transcending ways, but not statically, what should be socially desirable or not. Her social theory is critical in a kind of universalist sense precisely because she advances unconditional questioning and interrogation of established meanings. On this, she is much closer to Habermas rather than to Rorty.

Like Butler, Laclau also endorses radical democratic concerns that compel him to engage with the question of context-transcendence, despite his reticence to deal directly with issues of validity and justification (again, in agreement with Butler). Hence, he assumes that ethical objectives constitute a desirable context-transcendent object, which he further describes as devoid of concrete content. Although he accepts ethical context-transcendence and emancipatory commitments, he rejects idealized

⁷ By this I do not refer to, or incriminate, Elliott’s position. Elliott has at various points employed both schools of thought (Papastephanou 2006).

standards of validity and the specification of normative presuppositions of argumentation (even the formalist ones) as supposedly metaphysical. From his poststructuralist standpoint, Laclau would agree with Elliott that Habermas promotes a vision of an ideal speech situation that delimits in a universalistic manner the normativity of transcendence prior to actual, practical and democratic collective verdict (Laclau 2000, pp. 81–2). Thus Laclau would prefer to preserve the transcendent object as an empty place.

To summarize and critique the two positions, of Butler and of Laclau, I shall rely here on Cooke. As Cooke writes, ‘Butler does not reject universal concepts such as democracy, freedom, truth or, indeed, the concept of universality itself. What she rejects is the closure of such concepts: static conceptions that refuse to acknowledge their own dependency on particular cultural values, fail to respond to their own constitutive exclusions, and block attempts to rearticulate them in more inclusive and emancipatory ways’ (Cooke 2006, p. 78). Laclau, in turn, ‘seems reluctant to allow any ethical content to the transcendent object for fear that singling out certain goals in advance as ethically valid ones would lead to a closure of the democratic process’ (Cooke 2006, p. 94). In my opinion, what both theorists overlook is that no matter how motivating and powerful an ideal might be, it cannot dispense with the justificatory ‘pause for thought’, i.e., with the moment when the perennialism of deconstructive undecidability is suspended and the argumentatively besieged void is filled with the most convincing content. That is, there is a strong connection between justification and motivation, for if the former is inadequate, the motivating power of an image of the good is too weak as well as too arbitrary. When the transcendent object is divorced from the force of the better argument or described as void, the problem that arises is that the distance separating its various approximations appears invariable, leading to relativist conclusions. Ultimately, in such universes, all theories are equidistant from truth.⁸

Moving directly (for reasons of space) to the conclusions of Cooke’s critique of Butler and Laclau, we see that, to Cooke, both theorists fall prey to their hostility to what they regard as reconciliatory and rationalist residues in Apel, Habermas and the new generation of the Frankfurt School critical theory. It turns against their own approach because it

leads them to a costly unwillingness to address their own theoretical problems on the justificatory plane (Cooke 2006, pp. 73–95). What is important for educational action research is that the concerns of its protagonists, from Elliott down to Carr and Kemmis are in no way obsolete, since the discussion of their key concepts continues relentlessly and vividly. Thus, the argument: that educational action research is bypassed by postmodernism and by the expiration of the emancipatory ideal; or that the criticisms addressed to Habermas’s critical theory have reduced or effaced the significance of justificatory issues is implausible. As for adherents to the poststructuralist trend, the justificatory plane may be less dominant and the emphasis on argumentative reasoning suspect from the start, but the motivational force of the ethico-political commitment to particular conceptions of the good as emancipation and redirection is no less apparent and demands argumentative support. As Cooke argues, ‘ideas of context-transcending validity have not become unthinkable’ and the ideas of immanence and transcendence ‘are not deeply incongruent but must be set in dialectical motion’ (2006, p. 74).

Conclusion

A reformulated and democratized conception of reason steers clear from the finalism of over-determined, detailed portrayals of human perfectibility. Yet, as Cooke succinctly argues, this conception of reason has to preserve a context-transcending quality and to balance out critical immanence with modest transcendence. Otherwise it loses sight of cultural learning processes and becomes unable to account for the permeability, revisability and universalizability of life forms. Positing truth as a transcendent object that is purely void does not succeed in staving off relativism. Consensual as well as agonistic notions of truth (both in their convergence and divergence or their shortcomings and merits) reveal the complexity of issues of validity regarding competing positions on ethical life.

Against philosophies that fail to mediate between theory and practice or fail to strike the right balance of determinacy and open-endedness, what is still defensible is not only the force of the better argument, as it is the case with most accounts within the framework of philosophy of intersubjectivity, but also the force of the pictorial element in ethics that can motivate human redirection and social change. Through her professional action, the teacher can contribute to both: she can serve a communicative ideal of discursive search for what ‘a good life’ might mean; and she can also approximate or incarnate a concrete image of how the subjects of a better life might be. This could be a true reconciliation of words and deeds in a harmonious interplay, where theory and practice

⁸ Cooke raises a similar objection to Laclau in 2006, p. 157 and further objections to Laclau in fn 2, p. 229. Also, in assuming the transcendent object as void, Laclau ‘denies the possibility of an ethical relation between object and representation, with the result that the transcendent object loses its regulative functions’ (Cooke 2006, p. 93).

meet in a relation of mutual fidelity. To this end, educational action research can carry on to be an additional methodological assistance, while seeking ways to its own improvement.

Note on Contributor

Marianna Papastephanou studied Philosophy at the University of Cardiff (Wales) and Berlin (Germany). She has taught in the department of Philosophy at Cardiff and currently teaches Philosophy of Education at the University of Cyprus. She is the editor of *K.-O. Apel: From a Transcendental-Semiotic Point of View* (1998), the author of *Educated Hope and Educated Fear* (2009) as well as the author of various articles in Philosophy and Philosophy of Education Journals.

References

- Adorno T (1972) *Theorie der Halbbildung*. In: Tiedemann R (ed) *Soziologische Schriften*, 1st edn. Frankfurt am Main, Suhrkamp
- Adorno T, Horkheimer M (1979) *The dialectic of enlightenment*. Verso, London
- Arendt H (1989) *The human condition*. University of Chicago Press, Chicago
- Badiou A (1999) *Manifesto for philosophy* (trans: Madarasz N). Albany, SUNY Press
- Badiou A (2005) *Infinite thought* (trans: Feltham O, Clemens J). London, Continuum
- Brandom R (1994) *Making it explicit: reasoning, representing, and discursive commitment*. Harvard University Press, Cambridge
- Butler J (2000) Restaging the universal: hegemony and the limits of formalism. In: Butler J, Laclau E, Zizek S (eds) *Contingency, hegemony, Universality*. Verso, London, pp 11–43
- Carr W (2004) Philosophy and education. *J Philos Educ* 38(1):55–73
- Carr W, Kemmis S (1986) *Becoming critical: education, knowledge and action research*. Falmer Press, London
- Carr W, Kemmis S (2005) Staying critical. *Educ Action Res* 13(3):347–357
- Cooke M (2006) *Re-presenting the good society*. MIT Press, Cambridge
- Dews P (1987) *Logics of disintegration*. Verso, London/New York
- Elliott J (2003) Interview with John Elliott. *Educ Action Res* 11(2):169–180
- Elliott J (2005) *Becoming critical: the failure to connect*. *Educ Action Res* 13(3):359–373
- Habermas J (1989) *The theory of communicative action*, vol 2 (trans: McCarthy T). Cambridge, Polity
- Habermas J (1991) A reply. In: Honneth A, Joas H (eds) *Communicative action*. MIT Press, Cambridge, pp 250–251
- Habermas J (1992) *Moral consciousness and communicative action* (trans: Lenhardt C, Nicholsen SW). Cambridge, Polity Press
- Laclau E (2000) Identity and hegemony: the role of Universality in the constitution of political logics. In: Butler J, Laclau E, Zizek S (eds) *Contingency, hegemony, Universality*. Verso, London, pp 44–89
- Lamb WRM (1977) *Plato's Laches, Protagoras, meno, euthydemus*. Harvard University Press, Cambridge
- Norris C (1991) *Spinoza and the origins of modern critical theory*. Blackwell, Oxford
- Papastephanou M (1997). Communicative action and philosophical foundations. *Philos Soc Criticism* 23(4):41–69
- Papastephanou M (2000) The idea of emancipation from a cosmopolitan point of view. *Continental Philos Rev* 33:395–415
- Papastephanou M (2006) Philosophical research and educational action research. *J Philos Educ* 40(2):187–203
- Papastephanou M (2009) Method, Philosophy of education and the sphere of the practico-inert. *J Philos Educ* 43(3):451–470
- Rorty R (1993) Putnam and the relativist menace. *J Philos* 90(9):443–461

Olav Eikeland

Abstract

In discussing modernism versus post-modernism, positing “transcendent” universal and “immanent” local standards as contrary opposites works as an inhibiting straitjacket. This comment on Marianna Papastephanou’s article attempts to support and reinforce her critical theorist intentions to overcome this opposition by invoking viewpoints from the philosophy of Aristotle, interpreted as a dialectical philosopher in light of the totality of the *Corpus Aristotelicum*, not by isolating his practical from his theoretical philosophy. The argument is that immanent transcendence is both possible and necessary in every local human culture, already implied in the concept of immanent critique.

Keywords

Action research • Aristotle • Critical theory • Pragmatism • Dialogue

Marianna Papastephanou has contributed a thought-provoking piece taking discussions among educational action researchers (Carr and Kemmis 2005, and Elliott 2005) as her starting point in examining the conceptualization and characterization of research in education. She asks, should action research base itself on critical theory, on Aristotelian *phrónêsis*, or on a neo-pragmatic postmodernism rejecting abstract idealism on behalf of “reason” in favour of a radical contextualism related to local standards? Indeed, Papastephanou construes the theoretical opposition sharply in terms of a contextualism bound by local habits and customs *versus* a transcendence of local traditions that relates to standards somehow more universal (*a priori* according to Elliott 2005).

These questions and contrasts concern not only action researchers, of course. Can anyone criticize “ways-of-doing-things” shaped and determined through local cultures and traditions, without relating to standards transcending the same cultures and traditions? In what direction should we

develop our individual and collective practice, towards which standards? Cultures are greatly variegated; how can we choose one before another, by which criteria? How can we choose standards non-arbitrarily, as more than just private or group preferences? Or can’t we choose at all; just accept – rationalize – whatever we’re habituated into, or seduced into liking, or even biologically determined to prefer?

But being “against” or “in favour” of something on grounds like these – culture against culture, tradition against tradition, belief against belief, habit against habit, preference against preference, desire against desire – is insufficient. It suggests a Hobbesian “natural state” takes priority: *bellum omnium contra omnes*, [the war of all against all] or, at best, a purely rhetorical regime of persuasion and seduction. Yet isn’t this how both post-modernism and modern complexity theory tell us cultural patterns evolve: as different forces push and pull, new patterns emerge similarly whether in interstellar space, in bath-tubs, in ant-hills, or in human societies? Even Wittgenstein (1969, §§ 34, 110, 139) concluded that ultimately, different practices have to speak for themselves as ungrounded ways of acting, simply being as they are.

So, how can we imagine a critical stance and radical change non-arbitrarily, how can we sort good from bad

O. Eikeland (✉)
Faculty of Education and International Studies, Akershus University
College, Kjeller, Norway
e-mail: olav.eikeland@hioa.no

within a culture, how can different cultures approach each other without some transcending and commonly binding ideas of e.g. “the good life”, fairness, justice, and so forth? It is the point at which neo-pragmatism separates from critical theory, according to Papastephanou. Yet it is a *theoretical* discussion since *practically*, both individuals and cultures keep either conforming or transforming continuously, apparently irrespectively of all theoretical considerations. But as long as we think justifications and trying to understand (not just modelling and predicting) are important to research in education, theoretical clarifications remain so too.

For Papastephanou, the neo-pragmatist position appears only to have theoretical resources for incremental improvements, that is, by solving problems or resolving culture-internal pragmatic contradictions (“single loop learning”, according to Argyris and Schön 1978) while critical theory contains possibilities for radical, transformative change (“double loop learning”). Moreover, critical theory may consider local ideas about the good as faulty (p. 179). How so?

For action research, the neo-pragmatist (read post-modernist) perspective seems only to allow for improving the means within given cultural and institutional frameworks setting ends. It approximates to the instrumental (and modernist) reason of David Hume (1739–40:413–18, 457–59): slave of the passions setting preferred aims and ends for instrumental reasoning calculating means. But if we cannot rationally question and transcend the given ends and institutional settings for modern (or any) educational regimes, both we and every culture and epoch are not only practically but even theoretically framed and trapped by historical contingencies.

Papastephanou’s sympathies lie with critical theory. I share her concern about narrow and locally restricted immanence, apparently common to traditional Burkean conservatism and to contextualist post-modernism (cf. Brown and Jones 2001) but also to a currently widespread but one-sided emphasis on Aristotelian *phrónêsis* isolated from other parts of his philosophy. On the other hand, there is also a problem with a certain abstract and transcendent idealism *positing* or “intuiting” its standards of reason or religion as universal, turning uncomfortably easily into “revolutionary terror”. Many historical revolutions – right wing and left – confirm the danger of totalitarianism emerging from an abstract idealism of either arbitrary or rationalised standards presumed to be universal, saying: comply or die! It seems reasonable to ask how we can access and legitimize anything presumably universal, transcending every specific culture, as long as we irrevocably learn everything we come to know as situated members of specific historical cultures? Universal “*a priori*” views, valid “*sub specie aeternitatis*” [under the aspect of eternity], and situated nowhere in particular, are notoriously hard to come by.

So, are these our only alternatives: *either* a restricted localism *or* an abstract idealism? As a critical theorist, Papastephanou does not think so. Still, everything hinges on the *status* of the “transcendent” standards in relation to what inheres immanently and locally. Where and how are critical standards located and positioned in relation to the relevant “context”? The possibility of transcending *the opposition itself* is suggested by Papastephanou by launching the concept of *immanent critique* in several places.

With restricted space I cannot discuss Papastephanou’s antagonists. I limit myself to supporting and reinforcing her critical intention: *The opposition between “immanence” and “transcendence” is false, an unnecessary straitjacket for thinking about the local and the universal*. Positing them as contraries, where both extremes cannot be true at the same time, is wrong. Cultures intermesh without any sharp separating borderlines, and so do local and universal concepts and standards. Two *bodies* cannot simultaneously occupy the same position in space. Local and universal *concepts* can. Hence, *strictly speaking*, nobody is merely local and contextually closed off from other contexts. Among reasonable beings, transcendence is always and everywhere implied. Immanent critique aims to show this.

Hence, claiming a restricted contextualism and localism without simultaneously showing the immanent potential for transcendence according to inherent universal standards, is simply not to realize what it means to understand a particular, singular, or unique local situation (or culture, or individual) adequately. It is necessarily an *incomplete* description of any local human culture or any particular reasonable individual. In other words: *there is no adequate understanding or description of any local context without including common universal and transcendent standards operating locally*. Such standards are always already implied in the activities of any possible human culture and any reasonable being just as much as any restrictedly local convention, habit, or characteristic.

This emphasis probably sounds like critical theory, central to Marx and Hegel, even to Kant (whose *a priori* is transcendental but hardly transcendent). My additional claim is that this inseparability of local and culture-transcendent (hyper-cultural) elements is part of Aristotle’s philosophical insight, otherwise often interpreted as a restricted Burkean traditionalist, even by modern interpreters who isolate his practical from his theoretical philosophy. (For a detailed explanation of how the opposition might be transcended, I must refer the reader to Eikeland 2008).

So what does it take to understand a particular “anything” concretely and in adequate terms appropriate to its own peculiarity and uniqueness, not just as another “deducible” specimen subsumed under some simple general (*quasi a priori*) category or “covering law”? Seeing something or

someone uncritically from your own point of view – as “some-determinate-thing”, not as “no-thing” – requires the application of many defining general concepts brought along as – *quasi a priori* – instruments of perception. Such spontaneously brought-along instruments are mostly culturally determined on an intermediate level of abstraction; often *not* specifically or optimally adjusted to the particular situation or individual, making them more or less arbitrary even *intra*-culturally. Francis Bacon realized this much in trying to get behind the different spectator idols – as (*quasi a priori*) prejudices – through experimentation or by trying things out systematically practically. But aren’t prejudices (or metaphors) inescapable, as H. G. Gadamer taught us? As starting points they are, but always more or less adjusted to the particular to be understood. Subsequently, how do we adjust our perceptions and understandings to the individual or situation confronting us, how do we adjust our prejudices to become more *pragma*-adequate? Hardly by trying to eliminate all general ingredients, as did the logical positivists, in order to get at a “theory-free”, originary sense-perception.

Understanding cultures and individuals takes more than explaining merely physical objects and events. About physical things – as “incommunicados” (black boxes) permanently extraneous to our understanding – we must guess from a distance (“saving the phenomena”), or we manipulate them as recommended by Bacon, in order to approximate them and get beyond idolatrous guesswork. But “incommunicados” are different. Although they too might be posited as black boxes, manipulated, or used; with *incommunicados* we *can* communicate, i.e. we can create common space or ground, and fuse horizons. We might *enter* their (or our) local culture practically, and we might *share* an understanding through (what must be said in German) “*Kontextaufhebung*” (cf. Eikeland 2006), that is, by making things, activities, and practical patterns conscious that until now were merely sub-conscious(ly present and active). *Con-scious* literally means knowing some-thing *together*. Such togetherness can be instigated by bringing the pattern concerned into a common and shared *lógos*-space, by naming it in dialogue.

I cannot detail how this emerges from Aristotle’s *Corpus* here. But we should note that he writes about dialogue as concerned with sorting and sifting differences and similarities in realities and in word-meanings, and with eliciting definitions *from acquired practical experience* (*empeiría*) among participants. For both Plato and Aristotle, dialectics constitutes “the way” (*hê hodós*) of discovery and construction towards basic principles in *every* disciplined inquiry. In addition, it is necessary in order to achieve a concrete understanding (*súnesis*) of any particular, as part of a deliberative *phrónêsis*. Generally, dialectics substitutes for *nous* (mind) and *noêsis* ([reflective] thinking). Every natural language contains the resources for creating the

critical distance needed to “reify” whatever activity-pattern we enact by *bending* our focus *back* on it reflectively, and, *eo ipso*, for entering into a critical dialogue.

Eikeland (2008) tries to show how such dialogical activity amounts to a “*theor-ethics*”, i.e. an ethics implied in *theoretical* activity according to Aristotle (contrasted particularly to *poïesis*/making and *khreîsis*/using, but only to a *certain form* of *praxis*/doing). The dialogical *theoretic*s provides the necessary and common (*koiná*) preconditions (everywhere and always already implied and presupposed) for getting to know any unique particular in non-alienating, appropriate, and adequate terms. Hence, the *theoretical* interest and respect for each complex, particular, individual, unique, and local situation as such, as a whole, and in itself (not for the manipulative use of specific aspects serving external interests) *is* the universal standard of *both* ethics *and* cognition implied in every local situation (if it really aspires to be adequately local and particular). But, of course, this *theoretical* adjustment hardly happens spontaneously since all brought-along concepts (*quasi a priori*) must be examined *critically* through dialogue (the implied, ultimate, necessary, universal, and common but not always fully actualized precondition), and possibly put aside as “*idols*” through a sceptical-phenomenological “*epokhê*”.

Thus, immanent transcendence – through universal dialogical preconditions – becomes both possible and necessary for local uniqueness to emerge. Aristotle’s philosophy searches critically to clarify the individual (*psychological-ethical*), and the social-organisational (*political*) preconditions for virtuous “*pragma*-adequacy”. The challenge is how to actualize such preconditions in current research, in learning and education, and in work and community life. My own judgement is that contemporary action research and organizational learning certainly carry potentials worthy of exploring and developing.

Anyhow, Papastephanou’s adopted characterisation of critical theory – ‘*any mode of ethically oriented reflection that looks critically at social arrangements from the point of view of the obstacles they pose for individual human flourishing*’ (p. 178) – is Aristotelian.

Note on Contributor

Olav Eikeland, philosopher by education, has worked as an organisational and action researcher since the mid-1980s. His book, “*The Ways of Aristotle: Aristotelian Phrónêsis, Aristotelian Philosophy of Dialogue, and Action Research*” was published in 2008. His particular interest is how ancient philosophy of dialogue, action research, and organisational learning may contribute to the current transition from (broadly speaking) a socially monopolized “mode 1” kind of knowledge production to a more socially distributed “mode 2” kind. Until 2008 he worked at the Work Research Institute in Oslo as a researcher, research coordinator, and

Research Director. He is currently Research Director at the Faculty of Technical and Vocational Teacher Education at Akershus University College near Oslo, Norway.

References

- Argyris C, Schön D (1978) Organizational learning – a theory of action perspective. Addison Wesley Longman, Reading
- Brown T, Jones L (2001) Action research and postmodernism – congruence and critique. Open University Press, Buckingham/Philadelphia
- Carr W, Kemmis S (2005) Staying critical. *Educ Action Res* 13 (3):347–358
- Eikeland O (2006) The validity of action research – validity in action research. In: Aagaard Nielsen K, Svensson L (eds) *Action and interactive research: beyond theory and practice*. Shaker Publishing, Maastricht and Aachen, pp 193–240
- Eikeland O (2008) *The Ways of Aristotle: Aristotelian Phrónêsis, Aristotelian Philosophy of Dialogue, and Action Research*. Peter Lang Publishers, Bern
- Elliott J (2005) Becoming critical: the failure to connect. *Educ Action Res* 13(3):359–374
- Hume D (1778/1739–40) *A treatise of human nature*. Selby-Bigge and Nidditch, 2nd edn. Clarendon/Oxford University Press, Oxford
- Wittgenstein L (1969) *On Certainty [Über Gewissheit]*. Basil Blackwell, Oxford

Paul Gibbs

Abstract

In response to Papastephanou's thoughtful chapter I consider the skills one might require in order to undertake action research as she presents it. I call upon both Aristotle and Heidegger in their use of *dunamis* to discuss potentiality, actuality and capability as key elements to an account of the role that action research might play in becoming, and not just being, a teacher.

Keywords

Dunamis • Heidegger • Aristotle • For-the-sake-of • Action research

Introduction

Papastephanou's chapter offers a significant contribution to our understanding of action research by exploring the issues surrounding its social critical theory heritage and its resonance with contemporary thought. In reading it, however, I was struck not just by its relevance to current debates but by the way it struggles (often successfully) with the ontological in terms of emancipation and the constraints of professional practice. I am impressed with Papastephanou's analysis and want to extend it to consider the *being* of an action researcher within the process of *becoming* a professional that interests me, not explicitly in the debate showcased between Kemmis and Carr and Elliot but in a more ancient sense through the work of Aristotle. In this short supplement then, I would like to problematise the capabilities of becoming professional through an Aristotelian analysis with more than a nod to a Heideggerian interpretation. The piece intends to complement and extend the richness of Papastephanou's text, by considering the capabilities assumed for action research.

P. Gibbs (✉)

Institute of Work Based Learning, Middlesex University, London, UK
e-mail: p.gibbs@mdx.ac.uk

Critical Vigilance, Capability and Practice

Papastephanou recognises that it is not sufficient for the practitioner to engage in action research unencumbered by the desired or intended nature of the change in practice, claiming that the "issue of the ends of action persists and demands a constant critical vigilance on the part of the practitioner" (p. 181). I agree, but wonder how this vigilance is first obtained and then practised as a professional? In other words, what is the relationship between the capabilities of the practitioner to engage, understand and act to change for the good of others and themselves? How does the action revealed through the research relate to the existing learnt capabilities of the researcher and how do these existing capabilities limit deliberation and the potential action for change in specific situations? Specifically, does the debate assume to much in terms of practical wisdom embedded within the techniques of action research and so miss the necessary limitation imposed by the teacher capabilities as a becoming teacher.

These existential concerns are shared by Feldman (2002) and commented upon earlier by Papastephanou (2006) when appealing that "a new connection between philosophical and other kinds of research be established" (p. 188). However, jumping ahead of my argument, I think Aristotle might answer this through a discussion of the virtuous accumulation of practical experience, for he

concludes that “practical wisdom, then, must be a reasoned and true state of capacity to act with regard to human goods” (*Nicomachean Ethics*, Book VI, section 1140b, 20–21). To me this raises important issues relevant to a discussion of whether action(s) research is characterized as an instrumental tool for the enframing of practice within a form of epistemological scientism concerned with presencing the ‘formed’ professional teacher, or that of a capability to change in the sense of ‘can do’ clearly meant by Aristotle (2000) in the opening lines of both books V and IX of the *Metaphysics*.

Recently, Kemmis (2009) has offered an attempt to describe our engagement with action research using an Aristotelian rhetorical technique of the analogy, namely, as a dance between “‘sayings’, ‘doings’, and ‘relating’” (p. 463, italics in the original). This has a poetic feel but it assumes, as most of the literature on this subject does, that an analysis of one’s actions implies an unbounded ability to critically reflect and then similar capabilities to realise the achievements through practice. However, this seems unlikely given that what we say and do only reveals opportunities in as far as our capabilities allow us to perceive and do. To want more requires a need to raise our capabilities: it requires a notion of professionalism as an ongoing process where the existential becoming of a teacher is always futural: something to become. I can act in ways that are ‘for-the sake-of’ becoming a teacher and be called a teacher, but I can never reach what it is like to become a teacher.

In the deliberative aspect of educational action research then, in effect we are taking a stance on what, as a teacher, we would or should do in certain circumstances and often involving others “to aid us in deliberation on important questions, distrusting ourselves as not being up to the task” (*Nicomachean Ethics*, Book VI, 1112b, 10–11). We deliberate about things which could be different; where we have a choice. Thus deliberation is of what might be otherwise and requires a type of plausible reasoning rather than a strict application of critical reasoning and that, according to Aristotle, requires a syllogistic form of deductive logic (Rowley and Gibbs 2008, 362–363). Deliberation is not about ends but “what contributes to ends” (*ibid.*, 12). Moreover, once we have made our choice, Aristotle indicates that to be able to move others we need the capabilities to use “persuasive speech to lead to decisions” (*Nicomachean Ethics*, Book VI, 1939b, 18). These skills, both to pursue and to act, form the *technē* of being a teacher.

In terms of the learning opportunities from these deliberations, learning needs to be grasped in order to become the professional teacher desired. Heidegger (1995) offers helpful insights in his lecture series on *Aristotle’s Metaphysics, Vols. 1–3: On the Essence and Actuality of Force*. Here he explores the nature of *dunamis*, through a manner of being-at-work (Heidegger 1995, p. 143).

According to Brogan, the relationship between *dunamis* and *technē* is in having the capacity for producing. The central question of Heidegger’s analysis is, can one have a capability which is present: that is, I have it but it is not enacted? While the Megarian School of philosophy says no, Aristotle, and Heidegger through his interpretation, clearly argues that one can. For him, to have, process skills and be able to practise effectively is to “have *technē* [which] implies having acquired it, having become practiced in it in such a way that it allows me to comport myself knowingly in relationship to what is and to stand ready to deal with things on this basis” (Brogan 2005, p. 143).

Practice and the Acquiring and Actualizing of Capabilities

So how do we acquire capabilities, refresh and extend them, and how do we know if they are truly present rather than a mere Baudrillardian simulacra? According to Heidegger, the actualization of a capability itself is present but held back, not being used or is energised and enacted. By way of example, Heidegger (1995) chooses to discuss the being of a potter:

The potter, for example, is the one sitting in the tavern. He is the one who can make mugs; he is the one capable of producing them. With him a capability is actually there. Good, but how then? Where and how then is capability to pot . . . does he leave this capability at home when he goes to have a beer? (pp. 145–46)

In response to Heidegger it seems incontestable that he does not, but Heidegger continues his discussion to show that the mistake in thinking that he does is concerned with the potential to act and the actuality of enactment. Indeed, this has clear implications for the notion of assessment of the durability of capability, and our notion of being a teacher offers up a number of issues related to durability. How long are we a builder, a computer scientist, or a teacher? If we are once, do we remain so or are we only a teacher whilst we have the contemporary capabilities to act as one?

Heidegger argues that the actuality of a capability does not consist exclusively in its actualization, but is reliant on its being present, and being also possessed by the potter before he needs to use it. That is, the capability is present but is held back awaiting circumstances for it to be appropriately disclosed. Moreover, this capability remains with the potter unless he is physically incapable for doing the potting (by a stroke, say) or he forgets his skills in the passage of time (that is, his capability has been surpassed by the enactment required – the need to retrain every *n*th year and thus the importance of continued professional training). The acquisition of these skills is through training, and their continued utility is

maintained through practice. It is because I am already practiced in something that I can practise it. While practising, the capacity informs itself in the practice and therefore transforms itself. Moreover, it is only if I stop practising that I can claim I am proficient. As we have seen, it is not possible for this being to continue to seek to be; becoming proficient is the essential temporal requirement of being.

For Heidegger, “(E)nactment is indeed presence and non-enactment absence, but these statements do not hold simply in a straightforward way. Enactment is rather a practicing and as such, if it is at all, the presence of *training*” (1995, p. 164, italics added). The training is thus pre-practising and comes to be transferred into practice. This training harnesses the *dunamis*, the potential, and changes it dynamically into the capability required for the work to undertaken. As Mei notes, “ontologically rendered, this means that *dunamis* is a mode of practice in which the mutual poles of action and holding back are together a mode of disclosing and affirming within oneself what is understood to be practised”. Indeed, Heidegger considers the need for practice of skills learned by asking how one can be skilled without exercising these skills. He argues that training develops through practice, “and practising is actual and itself, when it follows through on what belongs to it to the end, when it has actually brought about a work” (1995, pp. 163–64).

The issue and advocacy of Heidegger’s concerns for capabilities, their potential for action and their realisation as our being are, as Aristotle states, the “sources, in general, of change or movement in another thing or by itself qua other” (ibid. 1019a, 20). Where these capabilities cease to exist, or become inappropriate for contemporary action, we become an outdated teacher as the worldhood of our workplaces passes us by. To continue becoming a professional we need to change our way of *becoming* a teacher, not by simply changing our skills of *being* a teacher. In doing so we may take a refreshed stance where the wonder of becoming a teacher is replenished. However, such a position does not assume we ever had, nor that we retain, a potential to do action research wisely; such praxis demands training.

This reading of *dunamis* provides a recognizable enactment of the “capacity of *technē* to complete a task

and a reflective comportment which views such tasks in relation to the possibility of being” (Mei 2009, p. 99). Indeed, I would suggest that such an interpretation is central to the nature of action research and deserves more attention notwithstanding the contribution of Papastephanou. To pursue these issues requires teachers and their teacher educators taking an existential stance on what they intend to become and to develop the resoluteness to follow this stance. If action research insights is a way to open up a clearer vision of such a future intent to lead to a flourishing for self, and others, then teachers need the strength of will to grasp these chances of freedom. The strengthening of a will to do so cannot be provided through reflecting and acting alone but through an authentic *telos* committed to becoming the best one might become.

Acknowledgement NB Paul Gibbs uses some of this text in Chapter 3, Learning as Knowledge of Being-in-the-World, e.g. page 25 http://link.springer.com/content/pdf/10.1007%2F978-90-481-3933-0_3.pdf

Note on Contributor

Paul Gibbs works at the Institute for Work Based Learning, Middlesex University, London. His interests including workplace research, pedagogy and practice. He edits the journal, *Higher Education, Skills and Work-based Learning*.

References

- Aristotle (2000) *Nicomachean ethics*. Cambridge University Press, Cambridge
- Brogan WA (2005) *Heidegger and Aristotle: the twofoldness of being*. SUNY Press, New York
- Feldman A (2002) Existential approaches to action research. *Educ Action Res* 10(2):233–251
- Heidegger M (1995) *Aristotle’s metaphysics*, vol 1–3. On the essence and actuality of force (trans: Brogan W, Warnek P). Indiana University Press, Bloomington
- Kemmis S (2009) Action research as a practice-based practice. *Educ Action Res* 17(3):463–474
- Mei TS (2009) *Heidegger, work and being*. Continuum, London
- Papastephanou M (2006) Philosophical research and educational action research. *J Philos Educ* 40(2):187–203
- Rowley J, Gibbs P (2008) From learning organization to practically wise organization. *The Learn Organ* 15(5):356–372

John Hattie, H. Jane Rogers, and Hariharan Swaminathan

Abstract

Meta-analysis is now a well-established form of synthesizing literature, and syntheses of meta-analyses are now being produced in educational research. The chapter provides an overview of the method, discusses syntheses of meta-analyses, and argues that these methods can be of particular assistance for establishing benchmarks of comparison about educational outcomes. The literature relating to influences on achievement is used to explore the issues.

Keywords

Meta-analysis • Literature reviewing • Achievement • Statistics • Evidence

Introduction

One of the most important questions in educational research is, “What are the major influences on student achievement?” This question has a voluminous research literature. It would hardly be an exaggeration to say that every hour an article is produced on this topic! The downside of this abundance is that one can find articles to defend almost any position. One of the major problems in education is that “everything seems to work” – we have millions of teachers believing that what they do makes a difference, we have claims galore about the latest thing to make a difference, we have large numbers of articles starting with the common refrain that “evidence shows,” and we have “What works” recipes aplenty. It is

not difficult to find studies on this topic that can be used to defend any claim, product, or policy aimed at enhancing achievement. Everyone seems to win, and as a result it is perhaps not surprising that the world of schools seems as if it has hardly changed over the past 200 years (Cuban 1984).

In the seminal article that introduced the ‘meta-analysis’ phenomenon, Glass (1976) noted the differences between primary analysis (the original analysis of data), secondary analysis (the re-analysis of data typically used when answering new questions with old data), and meta-analysis, or the statistical analysis of a large collection of analysis results from individual studies for the purposes of integrating the findings (the analysis of analyses). Meta-analysis is now 30 years old, and during that time it has changed the way many researchers review previous literature (see Hunt 1997, for a history). This is exactly what meta-analysis is: a systematic method for reviewing and synthesizing past literature. On its 25th birthday, Gene Glass (2000) noted that it has “grown from an unheard of preoccupation of a very small group of statisticians working on problems of research integration in education and psychotherapy to a minor academic industry, as well as a commercial endeavor” (p. 1). The growth is enormous and can be illustrated in the following graph (Fig. 26.1).

While the ERIC and PsychInfo databases have had a similar number of articles referencing “meta-analysis” (about 90 a year for ERIC and 175 a year for PsychInfo), the numbers for

J. Hattie (✉)

Melbourne Graduate School of Education, University of Melbourne,
Grattan Street, 3010 Parkville, VIC, Australia
e-mail: jhattie@unimelb.edu.au

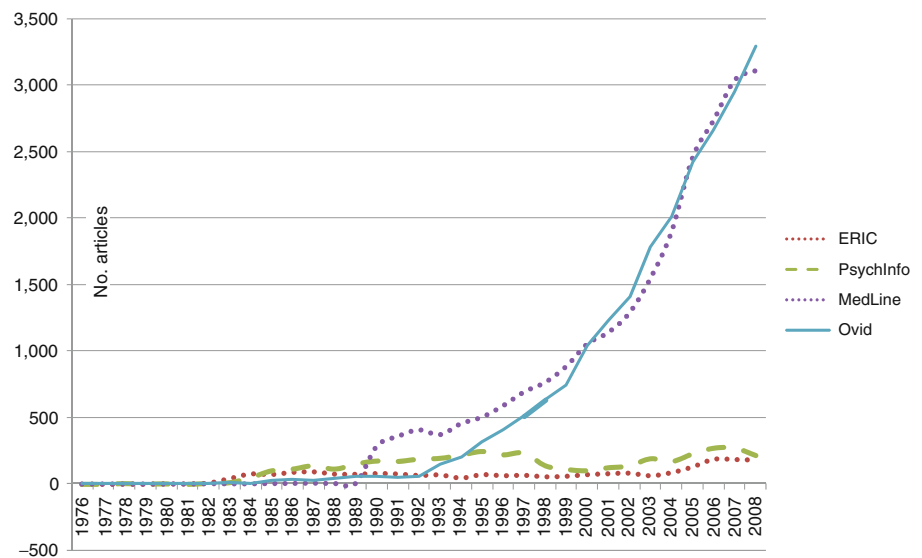
H.J. Rogers

Neag School of Education, University of Connecticut, 115 N Eagleville
Rd, 06269 Storrs-Mansfield, CT, USA

H. Swaminathan

Department of Educational Psychology, Neag School of Education,
University of Connecticut, 115 N Eagleville Rd, 06269 Storrs-
Mansfield, CT, USA

Fig. 26.1 Number of articles per year for ERIC, PsychInfo, MedLine and Ovid



MedLine and Ovid have increased exponentially from about the mid-1990s. At the time of writing, the citations of “meta-analysis” in the Web of Science are 29,483; MedLine, 23,808; Ovid, 22,844; Sage, 17,122; ProQuest, 15,339; Academic Search, 13,074; JStor, 12,229; PsychInfo, 9,052; Sociological Abstracts, 2,909; ERIC, 2,318; and in EconLit, 312. About a quarter of the articles in many review journals (for example, *Psychological Bulletin*, *Review of Educational Research*) include the word meta-analysis in the title.

The present chapter is not a review on how to conduct meta-analyses (there are plenty of these, see Cooper and Hedges 1994; Glass et al. 1981; Lipsey and Wilson 2001), nor does it illustrate the method via a particular meta-analysis. It aims to provide an overview of the value of this method of reviewing literature to educational research, advances the notion that it is now time to consider syntheses of meta-analysis, and counters the claims that just because statistics (and sometimes advanced statistics) are used that this makes the method have a stronger claim to “evidence”. The existence of a wealth of data should not lead to suspension of critical judgment. A major message of this chapter is that the standard by which we make most comparisons in education (the “zero” effect-size) is misleading and a barrier to the advancement of our discipline.

The Basics of Meta-analysis

The basics of meta-analysis include finding a sample of studies, developing a single underlying continuum on which to compare results, using a metric to place effects or studies along this continuum (effect-sizes), and using moderators to explore in more detail the implications of these effects.

Formulating a Problem

Advances in a discipline come from identifying appropriate problems that are worth addressing. In our social science discipline, we rarely make paradigm shifts, have too few competing theories, and so often add to our corpus of literature sidebars, unrelated irrelevancies (sometimes with beautiful designs), and information not connected to a worthwhile problem. Not all problems can be addressed by meta-analysis, and given its basic requirements of means, sample size and standard deviations then it is clear that many types of research papers are not amenable to including in this method of literature synthesis. Worthwhile problems typically are anchored in a rich literature of ideas, can add to our understanding sometimes by reformulating currently debated problems, and an aim of meta-analysis should be to provide some answers and directions to the problem. The problem is used to formulate a coding protocol that allows the appropriate sources of evidence to be collected in a meta-analysis.

Finding Relevant Studies

Finding relevant studies on most topics in education is less of a concern today than in the past, given the technological advances available to us on our desktops. The first most critical concern in a meta-analysis is defining the outcome of the problem at hand. Only questions that can be phrased in terms of outcomes or an effect can be subjected to quantitative meta-analyses, and only studies that include basic statistics related to this outcome (such that an effect size can be calculated) can be used. There are many sources that outline how to conduct searches for articles via using the more established databases and grey literature, and by

Fig. 26.2 A continuum of effects



emailing authors and dredging reference lists (Cooper and Hedges 1994). Once articles are located, then begins the tedious and time-consuming task of coding the articles, calculating the effect sizes, finding independent raters and resolving differences, and analyzing the results. There are computer programs to help in this process, but the time to code the articles should not be underestimated.

Creating a Single Underlying Continuum of Effects

One of the major advances of meta-analysis is the notion of a single underlying continuum of effects. Figure 26.2 shows one possible depiction of this continuum (e.g., to address achievement-related questions). Influences on the left of this continuum are those that decrease achievement, and those on the right increase achievement. Those near the zero point have no influence on achievement outcomes.

Defining a Metric Along This Continuum

An appropriate scale is needed so that as many outcomes as possible from the many studies relating to the problem can be converted onto this single continuum. This can be accomplished using effect sizes, which are a common expression of the *magnitude* of study outcomes. An effect size of $d = 0.0$ indicates no change in achievement related to the intervention. An effect size of $d = 1.0$ indicates an increase of one standard deviation on the outcome, and it can be shown that a $d = 1.0$ increase is typically associated with advancing children's achievement by 2–3 years, improving the rate of learning by 50 %, or a correlation between some variable (e.g., amount of homework) and achievement of approximately $r = 0.50$ (Hattie 2009). When implementing a new program, a $d = 1.0$ would mean that, on average, students receiving that treatment would exceed 84 % of students not receiving that treatment. Cohen (1988) argued that an effect size of $d = 1.0$ should be regarded as a large, blatantly obvious, and grossly perceptible difference, and as an example he referred to the difference between the average IQ of PhD graduates and high school students. Another example is the difference between a person at 5'3" (160 cm) and 6'0" (183 cm) – which would be a difference visible to the naked eye. An important consideration is that use of effect sizes highlights the importance of the *magnitude* of differences,

which is contrary to the usual emphasis in much of our research literature on statistical significance (which asks more about chance effects).

The relation between these two notions of magnitude and statistical significance is simple: Significance = Effect size \times Study size. This should highlight why both aspects are important when making judgments. Effect sizes based on small samples or small numbers of studies may not tell the true story, in the same way that statistical significance based on very large samples may also not tell the true story (for example, a results could be statistically significant but have only a tiny effect size!). Similarly, two studies with the same effect sizes can have different implications when their sample sizes vary (we should place more weight on the one based on the larger sample size). Many studies that are by themselves not statistically significant can, when combined via meta-analysis, lead to powerful and defensible conclusions about the size of the effect. The aim should be for all three to be the best we can make them: largest sample sizes, statistical significance to rule out chance effects, and well-estimated effect sizes based on the best set of studies we can find.

Thus, we have a continuum and a scale (effect size) to ascertain which of the many possible influences affect achievement. Many textbooks have detailed how effect sizes can be calculated from various summary statistics such as t -tests, ANOVAs, and repeated-measures (for example, Glass 1977; Glass et al. 1981; Hedges and Olkin 1985). Statistically, an effect size can be calculated in two major ways:

$$\text{Effect size} = [\text{Mean}_{\text{treatment}} - \text{Mean}_{\text{control}}]/\text{SD}$$

or

$$\text{Effect size} = [\text{Mean}_{\text{end of treatment}} - \text{Mean}_{\text{beginning of treatment}}]/\text{SD}$$

where SD is the pooled sample standard deviation. There are many minor modifications to these formulas, and for more detail the interested reader is referred to Glass, McGaw and Smith (1981), Rosenthal (1991), Hedges and Olkin (1985), Hunter and Schmidt (1990), and Lipsey and Wilson (2001). As an example, imagine two groups of students (e.g., one receiving some innovation and one not); one group has scores on some test of 2, 3, 4, 5, 5, 5, 7, 7, 9, 10, which leads to a mean of 5.70; and another group has scores 2, 3, 4, 4, 5, 5, 5, 6, 6, 7, which leads to a mean of 4.70. The pooled standard deviation is the spread across all 18 scores or a

weighted average of the two standard deviations, with a value of 2.09. Hence the effect-size is $(5.70-4.88)/2.09 = .48$. The problem is that nearly all studies do not include the raw data and hence the advantage of meta-analysis is that these effect-size values can be calculated from the summary statistics that are usually provided (in the above case, all one needs is the means and standard deviations and not the raw scores). Many statistics (e.g., correlations, t-tests, F-tests, chi-squares) can be converted into this metric. For example, effect size $d = r/[1 - r^2]^{.5}$ for correlations, and $d = t(1/n_e + 1/n_c)^{.5}$ for t-tests.

These are the major ingredients of meta-analysis: a problem, a set of studies, and effect sizes calculated and converted to a single common scale. Among many others, Rosenthal and DeMatteo (2001) outlined the five basic steps in conducting a meta-analysis: (1) Define the outcome of interest (e.g., effect of homework on achievement); (2) systematically collect and code studies on this topic; (3) look closely at the calculated effect sizes for spread and meaning (nothing replaces a good eye and judgment); (4) combine the individual effect sizes to get an overall average, spread, and confidence intervals; and (5) explore various moderators to this overall effect (see below). This is but a very broad overview of the process of doing a meta-analysis and calculating effect sizes. There is an industry of books, computer programs, and other aids to assist the researcher.

There is no one best method for conducting a meta-analysis. Schulze (2004) has outlined and made worthwhile comparisons between many of the methods. He argued that different methods estimate slightly different population parameters, make different assumptions, and are based on different models (for example, fixed- vs. random effect models). Meta-analyses can have different purposes: some focus on the mean of the population distribution, others on the variance of the distribution, others on both, and yet others more on the moderators of these means and variances. Schulze uses Monte Carlo studies to show the different implications – sometimes trivial, sometimes large.

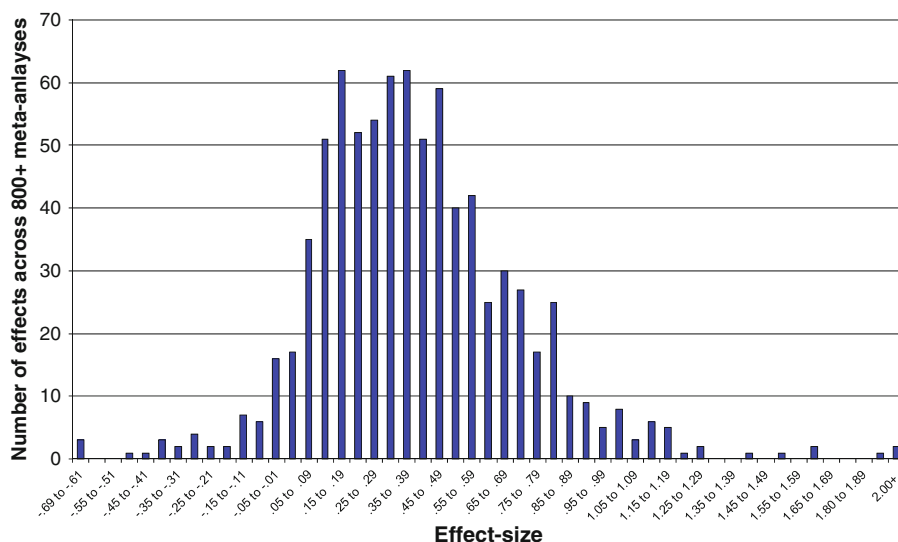
There is now a sufficient number of meta-analyses on any given topic to begin the next step of synthesizing these meta-analyses, and in particular noting the particular contributions of each, and how they differ from and confirm each other. As an example of synthesizing meta-analyses, take an examination of five meta-analyses on the effect of homework (Cooper 1989, 1994; Cooper et al. 2006; DeBaz 1994; Paschal et al. 1984). Over these five meta-analyses, there were 161 studies involving more than 100,000 students that investigated the effects of homework on students' achievement. The average of all these effect sizes was $d = 0.29$, which can be used as the best estimate of the typical effect size of the influence of

homework on achievement. Thus, compared to classes without homework, the use of homework was associated with advancing children's achievement by approximately 1 year, improving the rate of learning by 15 %. About 65 % of the effects were positive (that is, improved achievement), and 35 % of the effects were zero or negative. However, an effect size of $d = 0.29$ would not, according to Cohen (1988), be perceptible to the naked eye, and would be approximately equivalent to the difference between the height of a 5'11" (180 cm) and a 6'0" (182 cm) person.

We do need to be careful about ascribing adjectives such as small, medium, and large to these effect sizes. Cohen (1988), for example, suggested that $d = 0.2$ was small, $d = 0.5$ medium, and $d = 0.8$ large, whereas it is possible to show that when investigating achievement influences in schools, $d = 0.2$ could be considered small, $d = 0.4$ medium, and $d = 0.6$ large (Hattie 2009). In many cases this attribution would be reasonable, but there are situations where this would be too simple an interpretation. Consider, for example, the effects of an influence such as behavioral objectives, which has an overall small effect of $d = 0.20$ (see Hattie 2009, Chapter 9), and reciprocal teaching, which has an overall large effect of $d = 0.74$. It may be that the cost of implementing behavioral objectives is so small that it is worth using them to gain an influence on achievement, albeit small, whereas it might be too expensive to implement reciprocal teaching to gain the larger effect. Another example is that an increase of $d = .20$ may be dramatic for a country in the international comparisons of countries (for example, PIRLS, TIMMS, or PISA), but not in a particular class of students. The level of the unit of analysis may be critical.

A vivid example of an important "small effect" comes from medicine. Rosenthal and DiMatteo (2001) demonstrated that the effect size of taking low dose aspirin in preventing a heart attack was $d = 0.07$, indicating that less than one-eighth of 1 % of the variance in heart attacks was accounted for by using aspirin. Although the effect size is small, this translates into the conclusion that 34 out of every 1,000 people would be saved from a heart attack if they used low dose aspirin on a regular basis. Meyer (2001) lists other seemingly small effect sizes with important consequences: the impact of chemotherapy on breast cancer survival ($d = 0.12$), the association between a major league baseball player's batting average and success in obtaining a hit in a particular instance at bat ($r = 0.06$), the value of antihistamines for reducing sneezes and a runny nose ($d = 0.22$), and the link between prominent movie critics' reviews and box office success ($d = 0.34$). Instead of considering only the size of an effect, we should be looking for patterns and implications across effect sizes. Like most averages, the differences or moderators may be more exciting.

Fig. 26.3 Effect sizes related to achievement



Identifying Moderators

Although one of the powerful notions when using meta-analyses is that all the effects can be placed on a common continuum, we need to also consider the potential multidimensionality of the findings. This comes from the way we code the various *moderators* to these main effects. For example, knowing that homework has an average effect of .29 is interesting but not sufficient. It may be that the effects are systematically higher in high school than in elementary school, and indeed if we code all effects by this moderator, we find important differences: .64 for high and .15 for elementary schools. It may be that the effects are greater with longer time spent on homework – but this is not the case as the positive effects of homework were negatively related to the duration of the homework treatment. It may be that more task-oriented homework has greater effects than deep learning and problem solving homework – and indeed it does. The effects are greater for higher than for lower ability students and for older rather than younger students (Cooper et al. 1998; Trautwein et al. 2002). These moderators often tell the most powerful and fascinating stories, while a simple mean effect could be misleading and lead to wrong policy implications.

The major message is that in meta-analysis, the overall mean and moderated effect sizes are but summary statistics awaiting an interpretation. They need to be interpreted as part of a story that addresses the problem to be solved. They need to be as rich and contextualized as any literature review in educational research. Many of the earlier meta-analyses were summaries of data without an accompanying story.

Synthesizing Meta-analyses

One of the problems of meta-analyses is that they rarely tell the story alone. They need to be placed in perspective with other attempts to address the reviews of the literature and

they can be assessed not only in terms of their quality (of design and of credibility to address the problem) but also in terms of their relative value. For example, knowing that homework has an average effect size of .29 does not say much about its relative importance compared to many other influences on achievement.

The effect sizes based on 800 meta-analyses relating to achievement can be placed along the above single continuum from those that decrease to those that increase achievement. Across these 800 meta-analyses, there are about 50,000 studies, 150,000 effect sizes, and 200+ million students relating to the influence of some program, policy, or innovation on academic achievement in school (early childhood, elementary, high, and tertiary). These effects cover most school subjects (although the majority of effects are based on reading, mathematics, science, and social studies), all ages, and many comparisons. These effects are across the main areas of influence – from the student, the home, the effects of schools, teachers, curricula, and teaching methods and strategies. The details are available elsewhere (Hattie 2009) but there are at least five fascinating implications of this synthesis of meta-analyses.

1. *The effects follow a normal distribution.* To those immersed in large-scale statistics, this would not be surprising: normality is often but not necessarily present when there are large sample sizes. The normal distribution, however, is a consequence of the data and not imposed on it. Given this normal distribution, there are as many influences above the mean effect size as there are below it, and, most importantly, the mean is a reasonably good indicator of all the influences on achievement (Fig. 26.3).
2. *Almost everything works.* Ninety percent of all effect sizes in education are positive. Of the 10 % that are negative, about half are “expected” (for example, effects of disruptive students); thus about 95 % of all things we do have a positive influence on achievement. When

teachers claim that they are having a positive effect on achievement or when a policy improves achievement this is almost a trivial claim: virtually everything works. It should not be surprising that nearly every claim about some method, program, product, or teacher method can be claimed successful if the criterion is “adding value to achievement.”

3. *Setting the bar at zero is absurd.* If we set the bar at zero and then ask that teachers and schools “improve achievement”, we have set a very low bar indeed. No wonder every teacher can claim that they are making a difference; no wonder we can find many answers as to how to enhance achievement; no wonder every child improves. Raising achievement that enhances learning beyond an effect size of $d = 0.0$ is so low a bar as to be dangerous and is most certainly misleading.
4. *The bar needs to be set at the average of all effects.* The average effect size is $d = 0.40$, and this average summarizes the typical effect of all possible influences in education; it should be used as the benchmark to judge effects in education. Effects lower than $d = 0.40$ can be regarded as in need of more consideration, although it is not as simple as saying that all effects below $d = 0.40$ are not worth having (it depends on costs, interaction effects, and so on).
5. *The variance of the effect size is important.* This typical effect size of $d = 0.40$ may not be uniform across all students or all implementations of any influence. There may be many moderators (see the homework example). The major point of this “achievement barometer” or “achievement continuum” is to provide a basis to interpret the effects of change, both the overall effects and effects broken down by important moderators.

The information is not therefore simply in the size of the effect-sizes, but in their relative magnitudes. Only in this context can the story be told about the many possible influences on achievement. One of the major limitations of current reviews of literature is that they typically compare some innovation with $d = .0$. This has led to almost everything being defended as “working”, and almost every teacher claiming that they can enhance achievement. But about half of all effects are below $d = .40$ (not $d = .0$) so many of our students are falling behind while others move ahead as a function of the quality of the teaching they experience!

The more complete story about these effects is in Hattie (2009), but the basic conclusion is that most of the variance in effects on achievement is in the hands of teachers:

The story is about the visibility of teaching and learning; it is the power of passionate, accomplished teachers who focus on students’ cognitive engagement with the content of what it is they are teaching. It is about teachers who focus their skills in developing a way of thinking, reasoning, and emphasizing

problem solving and strategies in their teaching about the content they wish students to learn. It is about teachers enabling students to do more than what teachers do unto them; it is the focus on imparting new knowledge and understanding and then considering and monitoring how students gain fluency and appreciation in this new knowledge and build conceptions of this knowing and understanding. It is how teachers and students strategize, think about, play with, and build conceptions about worthwhile knowledge and understanding. Monitoring, assessing, and evaluating the progress in this task is what then leads to the power of feedback – which comes second in the learning equation. Feedback to students involves providing information and understanding about the tasks that make the difference in light of what the student already understands, misunderstands, and constructs. Feedback from students to teachers involves information and understanding about the tasks that make the difference in light of what the teachers already understands, misunderstands, and constructs about the learning of their students. It matters when teachers see learning through the lens of the student grappling to construct beliefs and knowledge about whatever is the goal of the lesson. This is never linear, not always easy, requires learning and over learning, needs dollops of feedback, involves much deliberative practice, leads to lots of errors and mis-directions, requires both accommodating and assimilating prior knowledge and conceptions, and demands a sense of excitement and mission to know, understand, and make a difference (pp. 237–238).

Enhancements and Extensions of Meta-analyses

Considerable attention has been given to ways of improving the basics of meta-analysis, but as Glass (2000) argued, most such improvements have added little. Glass noted, for example, that the notions of “best evidence research synthesis,” and, I would add, “realist synthesis”, and many other such minor modifications all miss the message about moderators and the importance of using meta-analysis to address a meaningful problem, along with all other evidence and interpretations that can be marshaled. Rather than throwing away articles that do not meet some arbitrary set of criteria about quality (such as do “best evidence” methods), we should be addressing the researchable question of whether the quality of study makes a difference to the average effect-size. If so, we should be more specific about the nature of these differences. In this way we can avoid an arbitrary set of specifications by authors to include or exclude studies in order to fit some supposedly higher goals.

It is well known that the average effect size has a statistical bias, and hence a correction formula should be used (Hedges and Olkin 1985). But as Hedges and Olkin show, this corrected effect size only affects the value of the effect size at the third decimal point unless the sample size is less than 8! (In the above example of two groups of ten students it reduces the average effect size from .49 to .47; once there are 20 in each group there is no change in the first two decimal

points using the correction.) There is no reason therefore to worry about it, but as all good statisticians would argue, there is no reason to not use it and be more accurate. There is also an arsenal of statistical weaponry to address the homogeneity issue, but most methods depend on the chi-square distribution and many of these tests are sensitive to sample size. This means that in nearly every case the assumption of homogeneity is rejected because of the power issue and not necessarily because the mean is indeed not a reasonable summary of the distribution. However, it is good practice to seek reasonable moderators to any overall conclusions.

At minimum, each effect size should be reported with its confidence interval. Again, using the above example, the standard error is $= .21$ (and the variance is $s_d^2 = (n_e + n_c) / n_e n_c + d^2 / (2(n_e + n_c))$). Thus, forming a 95 % confidence interval is $.49 \pm 1.96 \times .21 = [.09, .89]$, which would make the mean of .49 statistically different from zero, but more importantly gives a range of values that the population value may take when making comparisons with any value (such as the overall $d = .40$).

Many researchers have raised questions about the value of inferential statistics in meta-analysis, and there are many claims in relation to this issue – many esoteric, many not changing much, and many suggesting false precision. The fundamental unit of analysis in meta-analysis, the effect size, is already a summary statistic which, by its very nature, has lost a lot of nuance, detail and meaning. To further manipulate this statistic can add to the error already surrounding it, with little gain in meaning. It may make more sense to get access to the raw data and perform additional analyses; with the increase in archiving this is a worthwhile pursuit, but still practiced by too few Journals. There are some exciting developments in applying hierarchical linear modeling and structural equation modeling (for example, Raudenbush and Bryk 2002), but again we should not get too far from the raw data and compound sources of error when using effect sizes as the unit of analysis. Caution is the guideword with increases in sophistication.

The underlying statistical model for meta-analysis has become a more recent source of debate. The two major contenders are the more traditional fixed effects model and the more recently popularized random effects model. The random effects model allows generalization to the entire research domain whereas the fixed effects model allows an estimate of one universe effect size for all studies available (Kisamore and Brannick 2008; Schulze 2004). The fixed effects model assumes that there is a single “true” effect and each study to be combined provides an unbiased estimate of this true effect; the best indicator of this “true” effect is the (weighted) average of all estimate effects (with weights inversely proportional to the estimated variances of the effect sizes). The random effects model assumes that

the individual treatment effects are random and each may be estimating a different true effect. Hence an estimate of the population variance is added to the within-study variances and a weighted average of the individual study effects is used to estimate the “true” effect in the population. Thus, under the fixed effects model the standard error of the summary effect size is typically smaller than for the random effects model, as in the latter an extra source of variance (between-studies variance) is added (and is only of value if the number of studies is reasonably large). Typically, but not necessarily, the mean effect size from estimates based on the random effects model can be appreciably higher than when a fixed effects model is used. Hence, combining or comparing effects generated from the two models may result in differences solely because different models are used and not as a function of the topic of interest. The false choice of a model to gain a higher effect size seems hardly defensible.

One of the current disadvantages of meta-analysis is that it is based on a subset of all possible studies – only those that have data to calculate an effect-size. This eliminates nearly all qualitative studies amongst many others. Indeed, one of the limitations of qualitative studies is that they have not lent themselves well to accumulation and there are too few reviews of these studies. Too many sit in isolation, as their power to convince may be high but their power to generalize can be low (Krathwohl 1998). This is beginning to change; there are some notable advances in synthesizing qualitative studies. Kennedy (2008) for example provides an exemplar in her review of qualitative studies that address the question of the low impact of teacher subject matter knowledge on student outcomes. There is also a small but emerging methodology of qualitative synthesis and this promises to add a richness to our literature (Au 2007; Finfgeld 2003; Thorne et al. 2004).

The current mantra seeking evidence-based decision making often assumes evidence is of a certain type. There should be no implication that because meta-analysis is based on large quantities of data, then it has some inherent claim as “evidence”. “Evidence” is not neutral. Biesta (2007) has argued that evidence-based methods appear to offer a *neutral* framework that can be applied across areas (such as education, or medicine), and central to the method is the idea of effective intervention. Education, however, is never neutral, and its fundamental purpose is intervention or behavior change. This is what makes teaching a moral profession, with such fundamental issues of “Why teach this rather than that?” “How does one teach in defensible and ethical ways?” Snook (2003) has argued that teaching involves close personal relationships: between teachers and students, between one student and another, and between one teacher and another. Teaching involves a mission to change people in certain ways. Teaching occurs in schools in which

there are hierarchies of control and rules to be obeyed. The “power” in these interactions and contests is very real. Hence, claimed Snook, teaching involves ethics in its aims, its methods and its relationships. He argued that the role of the teacher involves a respect for autonomy, and a respect for reason. He cautioned that “when we hear too much of the technician teacher, the competent teacher, the skilled teacher, we should remind ourselves that education is essentially a moral enterprise and in that enterprise the ethical teacher has a central role to play” (p. 8).

Meta-analysis grew out of a problem. The overpowering number of studies on a given topic led researchers to devise ad hoc rules as to what could be or could not be included in a review. Meta-analysis then became an effective but limited method to summarize studies, and bloomed into development as a method to add richness to arguments that could be derived from past research. When the story rather than the data became more important, meta-analysis came of age. But we need to project into the future, as more and more meta-analyses may add little to an already large corpus of knowledge and understanding. We need to recall that meta-analysis grew as a methodology because we did not have access to the raw data, but with the increased power of technology this could change. More research on data archiving, sharing data sources, and programs to cumulate data could be of major import to the reviewing of literature. This seems a more optimal direction than more sophisticated methods to dredge the current meta-analyses.

The reporting from meta-analyses is becoming more standard and there are compendiums of advice as to how to best report the results. Indeed, there are even standards for reporting (Cooper 2009; Rosenthal 1995), but nothing beats a literate and careful reviewer, a story that transcends and makes sense of the body of evidence, and the development of bold ideas open to criticism.

Problems with Meta-analyses

A common criticism is that meta-analysis combines “apples and oranges” and such combining of many seemingly disparate studies is fraught with difficulties. It is the case, however, that in the study of fruit nothing else is sensible. The converse argument is absurd: no two things can be compared unless they are the same! Glass (2000) argued that, “The question of ‘sameness’ is not an *a priori* question at all; apart from being a logical impossibility, it is an empirical question” (p. 2). No two studies are the same and the only question of interest is how they vary across the factors we conceive as important. We grow from how we combine seemingly disparate bits of information and make meaning out of the collective.

Another criticism, which Cronbach (1982) referred to as the “flat earth society”, is that meta-analysis seeks the *big facts* and often does not explain the complexity nor appropriately seek the moderators. However, meta-analysis indeed can seek moderators, and classrooms are places where complexities abound and all participants constantly try to interpret, engage or disengage, and make meaning out of this variegated landscape. It is the case that there can be many common themes, although sometimes “averages do not do it justice” (Glass 2000, p. 9). The point is that the generalizability of the overall effect is an empirical issue, and there must be a constant investigation of moderators and mediators. This move from over-reliance on the average effect size to telling the story with the nuances of the details has been a pronounced change over the history of meta-analyses.

A further criticism is that the findings from meta-analysis are based on historical claims – that is, they are based on “past” studies, and the future is not bound by what worked yesterday. It is indeed the case that meta-analysis claims are historical, as it is primarily a research review, a synthesis of published studies. The degree to which these past studies influence today’s or tomorrow’s schools is an interpretative issue for the reader. Consider one example. The overall effect size of class size is relatively small ($d = .20$) compared to many other innovations (it ranks 106th in Hattie’s (2006) list of 138 influences). This is not a statement of what it could be, or what it should be, but what is has been. In the 100 studies which have compared (about half a million) students in classes of 25–30 with students in classes of 15–20, there have been very small increases in overall achievement. The fascinating question then becomes that of why this change has been so small when the promise (and cost) has been so great. Hattie’s review of this question shows that teachers change their teaching methods very little when moving from one class size to another, so maybe it is not surprising that there is little difference as a result (Hattie 2006). Imagine what could happen if teachers did change their methods to optimize the advantages of smaller class sizes.

Eysenck (1984) has been particularly critical of the use of low quality studies in any synthesis, promoting the cliché “garbage in, garbage out”. In meta-analysis, it is possible to address this question by ascertaining if the effects are affected by quality. In general, they are not. For example, Lipsey and Wilson (1993) summarized 302 meta-analyses in psychology and education, and used a number of outcomes (besides achievement) in their analyses (the overall effect was $d = 0.50$). They found no differences between studies that only included randomized versus non-randomized design studies ($d = 0.46$ vs. $d = 0.41$), or between high ($d = 0.40$) and low ($d = 0.37$) quality studies. There was a bias upwards from the published ($d = 0.53$) compared to non-published studies ($d = 0.39$), although sample size was

unrelated to effect size ($d = -0.03$). Sipe and Curlette (1996) found no relationship between the overall effect size of 97 meta-analyses ($d = 0.34$) and sample size, number of variables coded, and type of research design, and a slight increase in average effect size for published ($d = 0.46$) versus unpublished ($d = 0.36$) meta-analyses.

There is every reason to check the effects of quality, but no reason to throw out studies automatically because of lower quality (on whatever criteria). An excellent example of throwing out the wrong studies is the recent synthesis by Torgerson, Porthouse and Brooks (2005). They identified 29 studies from a total of 4,555 potentially relevant papers reporting evaluations of interventions in adult literacy and/or numeracy which were published between 1980 and 2002. Their criterion of acceptance was that only “quality” studies – that is, those studies that used randomized controlled trials – were selected. To decide that it is worthwhile to include only certain types of designs or only studies meeting some criteria of quality presupposes that the studies using only the specified designs or levels of quality are the best representatives of the population estimates. This is speculation, and by using meta-analysis these concerns are subject to verification. When the studies from Torgerson et al. (2005) are examined, it is clear that many of their randomized control studies were of low quality. The median sample size was only 52, and given that there were at least two groups (experimental and control) the “typical” study had only 26 people in each group. The average attrition rate was 66 %, so two-thirds of each sample did not complete the study. It would have been more defensible to include all possible studies, code them for the nature of the experimental design *and* for the quality of the study, and then use meta-analysis techniques to address whether the effects differed as a consequence of design and quality. The aim should be to summarize all possible studies regardless of their design – and then ascertain if quality is a moderator of the final conclusions.

Scriven (2005) has argued that a more critical criterion for all scientific conclusions is “beyond reasonable doubt (BRD)”, and in some cases randomized studies do not come close to being beyond reasonable doubt. “It seems more appropriate to think of ‘gold standard’ designs in causal research as those that meet the BRD standard, rather than those that have certain design features . . . The existence of more threats to internal or external validity in quasi-experimental designs does not entail a reduction of validity for well-done studies below BRD levels” (pp. 45–46). Scriven noted that one of the advocates of randomized controlled designs, Cook (2004), claimed that “Interpreting [randomized control trial] results depends on many other things – an unbiased assignment process, adequate statistical power, a consent process that does not distort the populations to which results can be generalized, and the absence of

treatment-correlated attrition, resentful demoralization, treatment seepage and other unintended products of comparing treatments. Dealing with these matters requires observation, analysis and argumentation”. As this last sentence notes, there may be many other research designs that can address critical education questions. Design method and quality of studies are mediators, not prior conditions for choosing studies in a synthesis of studies.

As in any study, the degree of generalizability of the studies in hand to the population of interest needs to be specified. The majority of the findings of the meta-analyses relating to achievement have been conducted in English-speaking, highly-developed countries. Therefore, generalizations cannot be made to analyses to non-English speaking, or non-highly developed countries. Many of the countries which contribute the majority of studies have much lower between- than within-school variance and this may be the most important consideration. For example, the conclusions from Hattie’s (2006) synthesis of meta-analyses (above) are unlikely to apply to countries where the between-school variance is large. Resources and opportunity can lead to major between-school differences; in many developing countries achievement is more related to students’ social status than it is to teacher quality.

Evidence based on effect sizes alone could lead to poor decisions. For example, the financial costs of the various interventions may need to be taken into account when making decisions about what works best. It may be that we can use some of the cheaper interventions if their effects are positive and this may be preferable to using some of the more expensive interventions. The problem is that there are many kinds of costs in education and various ways to interpret them: cost-minimization, where the intervention that is least costly is preferred; cost-benefit, where there is a trade-off of the costs and the benefits (in terms of effect size, ease of implementation, consistency with prior teacher practice, alignment with aims of the program); average versus incremental cost-effectiveness, or the incremental or marginal cost-effectiveness ratio, which is the cost of switching from what you are doing now to another treatment. Perhaps more critically, there are also the costs associated with lost opportunities for students to learn or engage in educational activities that truly make a difference – and which many of their fellow students are benefiting from! There are the “suffering costs” of being exposed to interventions with least effectiveness – no matter that the teacher has used the intervention before, enjoys it, or finds evidence to support it from anecdotal and rose-tinted perspectives (for example, looking for the positives). As Hanushek (2005) and others have demonstrated repeatedly, we spend millions, if not trillions, of dollars investing in innovations, changes, and policies in education without a lot of evidence that this

investment is making a difference to student outcomes. They may make a major difference to teachers' and students' working conditions, but not to the achievement outcomes.

It is noted above that meta-analysis on the same subject can lead to similar or even different conclusions. Further, it is possible that the results of meta-analysis can conflict with results from very large (and well-controlled) studies. In medicine, for example, LeLorier et al. (1997) noted that meta-analyses sometimes yielded different results from those of large-scale randomized trials. They reported that the results of a meta-analysis and a newer large randomized trials design matched (both were statistically significant, or neither was statistically significant) in about 66 % of cases, but did not match (one was statistically significant but the other was not) in the remaining 34 %. Although this comparison ignores differences in the magnitude of the effects (they were indeed quite similar) it does highlight that meta-analysis is a historical record – and new studies should be incorporated into any new meta-analysis and review of the literature. Of course, even randomized trials can differ from each other, and any difference begs the question as to why and how we can then devise the next study to explore differences. Advances in our discipline prosper from differences, and reviews can assist in identifying and highlighting them. Hence there is more power in accumulation in a defensible manner than in one big study (which no matter how large rarely controls for everything and rarely has the breadth to allow greater generalizability).

Conclusions

It is an opportune time for researchers to consider the power of synthesizing previous research in systematic ways to address critical problems in education. Too often, literature reviews are exhibitions that there has been prior reading, but often these are then disregarded and yet another study is added to the pile of studies on a given topic. There is little evidence of incremental gain from many of the more empirical aspects of our discipline, and in this way we are falling well short of the contributions that could be made (compared to philosophers and historians who can provide models as to how to incrementally stand on others' shoulders). Such syntheses can help others make more sense of current knowledge and understanding, enable more ready comparisons and combining of findings across individual studies, and lead to current work on these relative comparisons. This approach can provide what Norris and Ortega (2006) call "a synthetic research ethic" which includes (1) a clear description of how the literature was searched, and according to what criteria the primary studies were selected; (2) a clear focus on the

variables, characteristics, and data reported in the study, rather than on the conclusions drawn by the primary researchers; and (3) compilation of results and a search for generalizations by looking across studies in order to come to a systematic idea of what we know and what we don't know. Provided that there is a worthwhile problem that underlies the synthesis, the use of meta-analysis can add considerably to our joint understanding. The more recent trend to use meta-analyses alongside a more traditional review of studies not included in the meta-analysis (e.g., qualitative studies) and accompanied by analyses of new large and well controlled experiments and/or new data sets has raised the level of what seems required to advance our field (see Marsh et al. 2009). That there are sufficient meta-analyses to now consider similarities and differences across meta-analyses also adds a new dimension to literature reviewing, as long as we remember that we are systematically reviewing past studies.

Notes on Contributor

John Hattie is Professor of Education at the University of Melbourne and Director of the Melbourne Education Research Institute. His areas of interest are measurement models and their applications to educational problems, including item response models, structural equation modelling, measurement theory, and meta-analysis. John is President of the International Test Commission, associate editor of *British Journal of Educational Psychology*, and is part-time cricket coach and umpire.

Jane Rogers is an Associate Professor in the Measurement, Evaluation, and Assessment Program of the Neag School of Education at the University of Connecticut, where she teaches graduate courses in psychometrics and educational statistics. Her research interests are in applications of item response theory, assessment of differential item functioning, and educational statistics. She is co-author of a book on item response theory and has published papers on a wide range of psychometric issues.

Hariharan Swaminathan is Professor in the Neag School of Education at the University of Connecticut, and serves as the chair of the Department of Educational Psychology. Professor Swaminathan's research interests are in the areas of Bayesian statistics, psychometrics, item response theory and multivariate analysis. He is internationally known for his research in the area of item response theory and is the coauthor of two books on the subject. He is a Fellow of American Educational Research Association, and the recipient of the American Psychological Association's Jacob Cohen award for distinguished teaching and mentoring.

References

- Au W (2007) High-stakes testing and curricular control: a qualitative metasynthesis. *Educ Res* 36(5):258–267
- Biesta G (2007) Why “what works” won’t work: evidence-based practice and the democratic deficit in educational research. *Educ Theor* 57(1):1–22
- Cohen J (1988) *Statistical power analysis for the behavioral sciences*, 2nd edn. L. Erlbaum Associates, Hillsdale
- Cook TD (2004) *Beyond advocacy: putting history and research into debates about the merits of social experiments (social policy report, no. 12)*. Society for Research in Child Development, Ann Arbor
- Cooper HM (1989) *Homework*. Longman, New York
- Cooper HM (1994) *The battle over homework*. Corwin Press, Thousand Oaks
- Cooper HM (2009) *Research synthesis and meta-analysis: a step-by-step approach*, 4th edn. Sage, Beverly Hills
- Cooper HM, Hedges L (1994) *The handbook of research synthesis*. Russell Sage, New York
- Cooper L, Nye B, Greathouse S (1998) Relationships among attitudes about homework, amount of homework assigned and completed, and student achievement. *J Educ Psychol* 90(1):70–83
- Cooper HM, Robinson GC, Patall EA (2006) Does homework improve academic achievement? A synthesis of research 1987–2003. *Rev Educ Res* 76(1):1–62
- Cronbach LJ (1982) Prudent aspirations for social inquiry. In: Kruskal WH (ed) *The social sciences: their nature and uses*. The University of Chicago Press, Chicago, pp 61–81
- Cuban L (1984) *How teachers taught: constancy and change in American classrooms, 1890–1980*. Longman, New York
- DeBaz TP (1994) *A meta-analysis of the relationship between students’ characteristics and achievement and attitudes toward science*. Unpublished doctoral dissertation, Ohio State University
- Eysenck HJ (1984) Meta-analysis: an abuse of research integration. *J Spec Educ* 18(1):41–59
- Finfgeld DL (2003) Metasynthesis: the state of the art – so far. *Qual Health Res* 13(7):893–904
- Glass GV (1976) Primary, secondary, and meta-analysis of research. *Educ Res* 5:3–8
- Glass GV (1977) Integrating findings: the meta-analysis of research. *Rev Res Educ* 5:351–379
- Glass GV (2000) Meta-analysis at 25. <http://glass.ed.asu/papers/meta25.html>
- Glass GV, McGaw B, Smith ML (1981) *Meta-analysis in social research*. Sage, Beverly Hills
- Hanushek EA (2005) *Economic outcomes and school quality*. International Academy of Education, Brussels
- Hattie JAC (2006) The paradox of reducing class size and improved learning outcomes. *Int J Educ Res* 42:387–425
- Hattie JAC (2009) *Visible learning: a synthesis of 800 meta-analyses relating to achievement*. Routledge, London
- Hedges LV, Olkin I (1985) *Statistical methods for meta-analysis*. Academic, Orlando
- Hunt M (1997) *How science takes stock: the story of meta analysis*. Russell Sage, New York
- Hunter JE, Schmidt FL (1990) *Methods of meta-analysis: correcting error and bias in research findings*. Sage, Newbury Park
- Kennedy MM (2008) Contributions of qualitative research to research on teacher qualifications. *Educ Eval Policy Anal* 30(4):344–367
- Kisamore JL, Brannick MT (2008) An illustration of the consequences of meta-analysis model choice. *Organ Res Method* 11:35–53
- Krathwohl DR (1998) *Educational and social science research: an integrated approach*, 2nd edn. Longman, New York
- LeLorier J, Gregoire G, Benhaddad A, Lapierre J, Derderian F (1997) Discrepancies between meta-analyses and subsequent large randomized controlled trials. *N Engl J Med* 337:536–542
- Lipsey MW, Wilson DB (1993) The efficacy of psychological, educational, and behavioral treatment: confirmation from meta-analysis. *Am Psychol* 48(12):1181–1209
- Lipsey MW, Wilson DB (2001) *Practical meta-analysis*, vol 49, Applied social research methods series. Sage, Thousand Oaks
- Marsh HW, Borrmann L, Mutz R, Daniel H-D, O’Mara A (2009) Gender effects in the peer reviews of grant proposals: a comprehensive meta-analysis comparing traditional and multilevel approaches. *Rev Educ Res* 79:1290–1326
- Meyer GJ (2001) Evidence to correct misperceptions about Rorschach norms. *Clin Psychol Sci Pract* 8:389–396
- Norris JM, Ortega L (eds) (2006) *Synthesizing research on language learning and teaching*. John Benjamins, Philadelphia
- Paschal RA, Weinstein T, Walberg HJ (1984) The effects of homework on learning: a quantitative synthesis. *J Educ Res* 78(2):97–104
- Raudenbush SW, Bryk AS (2002) *Hierarchical linear models: applications and data analysis methods*, 2nd edn. Sage, Newbury Park
- Rosenthal R (1991) *Meta-analytic procedures for social research*, Applied social research methods series. Rev. Ed. Sage Publications, Newbury Park
- Rosenthal R (1995) Writing meta-analytic reviews. *Psychol Bull* 118(2):183–192
- Rosenthal R, DiMatteo MR (2001) Meta-analysis: recent developments in quantitative methods for literature reviews. *Annu Rev Psychol* 52(1):59–82
- Schulze R (2004) *Meta-analysis: a comparison of approaches*. Hogrefe & Huber, Cambridge
- Scriven M (2005) Causation. In: Mathison S (ed) *Encyclopedia of evaluation*. Sage, Thousand Oaks, pp 43–47
- Sipe TA, Curlette WL (1996) A meta-synthesis of factors related to educational achievement: a methodological approach to summarizing and synthesizing meta-analyses. *Int J Educ Res* 25(7):583–698
- Snook I (2003) *The ethical teacher*. Dunmore Press, Palmerston North
- Thorne S, Jensen L, Kearney MH, Noblit G, Sandelowski M (2004) Reflections on the methodological and ideological agenda in qualitative metasynthesis. *Qual Health Res* 14(10):1342–1365
- Torgerson C, Porthouse J, Brooks G (2005) A systematic review and meta-analysis of controlled trials evaluating interventions in adult literacy and numeracy. *J Res Read* 28(2):87–107
- Trautwein U, Köller O, Schmitz B, Baumert J (2002) Do homework assignments enhance achievement? A multilevel analysis of 7th grade mathematics. *Contemp Educ Psychol* 27:26–50

Using Educational Research as a Resource for Continuous Improvement in Education: The Best Evidence Syntheses

27

Adrienne Alton-Lee

Abstract

This supplement to Hattie et al. explains how the New Zealand Ministry of Education's Iterative Best Evidence Synthesis Programme draws upon meta-analysis within a realist synthesis framework. It discusses the iterative approach to the development and use of research syntheses for educational improvement. The goal of the programme is to make clear evidence of what works, what doesn't work, what makes a bigger difference, and why it matters to education. When the various meta-analytic findings are complemented by cases, underpinned by explanatory theory, and informed a 'first do no harm' approach, then the policy and classroom implications of evidence can be made useful to teachers and leaders seeking to invest their time and resources in fruitful ways. The piece underlies the importance of using evidence about change processes as well as the evidence about the focus of change in education as necessary to countering assumptions that educational change will follow from just knowing what makes a bigger difference, as if by magic.

Keywords

Outcomes • Evidence • Synthesis • Meta-analysis • Improvement

Iterative Best Evidence Syntheses

New Zealand's Iterative Best Evidence Synthesis (BES) Programme leads collaborative knowledge building and use in education by taking a brokerage role across policy, research and practice communities (Alton-Lee 2007). The touchstone of the programme¹ is its attention to selecting and synthesising evidence about influences on valued outcomes for diverse learners with a focus on what makes a bigger difference in the outcomes for all students. There are two major purposes of the programme: first, to be catalytic in advancing the use of research as a resource for continuous improvement; and second, to highlight and promote the kind

of high impact research and development in education that has refined effective approaches for diverse learners through cycles of collaborative implementation with teachers. It is not surprising that such forms of research and development can make a much bigger difference in education.

The use of effect sizes and the results of meta-analyses provide educators with invaluable information about where investment can make a bigger difference. For teachers, school leaders and policy makers this is a significant resource because it shows where working smarter not harder can make a bigger difference too. Hattie (2009) has been able to analyse national data from the Assessment Tools for Teaching and Learning database to ascertain the average student gain for a year of teaching in New Zealand across three subjects:

In our own New Zealand studies, we have estimated the yearly effect in reading, mathematics, and writing from years 4 to 13 (N = 83,751) is .35 – although this is not linear. (p. 17)

Accordingly, in the best evidence synthesis iterations (BESs) we use an effect size of $d = 0.35$ as an indicative

¹New Zealand Ministry of Education Best Evidence Syntheses (BESs) (2013), see: www.educationcounts.govt.nz/goto/BES

A. Alton-Lee (✉)
Ministry of Education, New Zealand, Wellington, New Zealand
e-mail: adrienne.altonlee@minedu.govt.nz

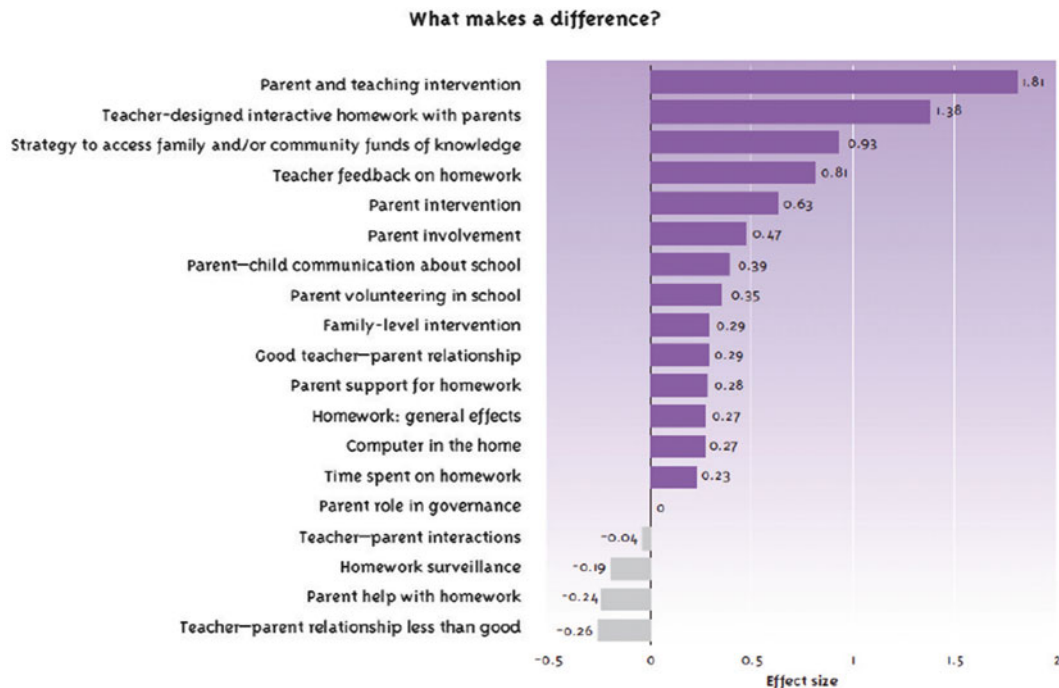


Fig. 27.1 Findings of a meta-analysis of research on the educational impact of making connections between schools, families/Whānau and communities (See Robinson et al. 2009, Chapter 7 <http://www.educationcounts.govt.nz/goto/BES>)

benchmark for the business-as-usual contribution of teaching over a year. This enables teachers to make initial judgements about potential impact for investment of their time. For example, in his synthesis of over 800 meta-analyses Hattie (2009) found an overall effect of $d = 0.74$ across two meta-analyses of 38 studies for reciprocal teaching approaches to improve reading comprehension. Reciprocal teaching is a way of specifically teaching reading comprehension originally developed by Palincsar and Brown (1984). Reciprocal teaching involves four ‘thinking skills’ that have been shown to improve comprehension and self-monitoring: clarifying, questioning, summarising, and predicting. The teacher uses explicit teaching, including modelling, repeated practice, and feedback to coach students into taking over leadership roles in using each skill in turn in a small group.

There are several New Zealand postgraduate theses² showing where the use of reciprocal teaching has been implemented over relatively short periods of time (intensively over around 5 weeks) resulting in accelerated achievement, student self-regulation, and peer leadership, using metacognitive and strategy skills. One New Zealand implementation for first year secondary students produced an effect size of $d = 1.10$ after students had 12–16 reciprocal

teaching sessions (with no effect at all for a shorter comparison intervention) (see Westera 2002).

Because the results of meta-analyses also show us where educational influences have a negative impact on student outcomes, it can be a resource in developing more ethical educational practices. We have waited too long for a ‘first do no harm’ in education principle. A meta-analysis for the *School leadership and student outcomes: Identifying what works and why best evidence synthesis iteration* shows both where many business-as-usual practices have negative effects overall, but also where high impact research and development can have very high positive effects (Fig. 27.1).

Knowing that a certain approach makes a bigger difference is insufficient. One worst case scenario is that policy takes an ‘evidence-based approach’ in which magical thinking is used around the implementation of ‘what works’ evidence. Taking an ‘evidence-based’ approach needs to be as assiduous in the process of change as it is in the focus of change if improvement is to occur. For improvement to follow then educators need to know *why* and *how* some approaches make a much bigger difference for valued outcomes for diverse learners. These are questions that demand theory, qualitative information, and an ecological approach to the multi-level and systemic changes needed to support improved educational practice. They are also helpfully informed by cases where effect sizes are high and the qualitative information illuminates the why and the how.

² See, for example, Fung et al. (2003), Kelly et al. (1994), and Le Fevre et al. (2003).

Examples of Best Evidence Syntheses

Through its series of best evidence syntheses focused on the outcomes-linked evidence about pedagogy, teacher professional learning and development, and educational leadership influences on valued student outcomes, the Iterative BES Programme is progressively explaining the how of educational improvement processes.

Four BESs were initially developed as part of the New Zealand Ministry of Education's medium term strategy policy work:

1. Quality Teaching for Diverse Students in Schooling (Alton-Lee 2003).
2. Community and Family Influences on Children's Achievement (Biddulph and Biddulph 2003).
3. Quality Teaching: Early Foundations (Farquhar 2003).
4. Professional Development in Early Childhood Settings (Mitchell and Cubey 2003).

In 2004 the *Guidelines for Generating a Best Evidence Synthesis Iteration* were developed (Haig 2004) using a realist synthesis framework in consultation with three national advisory groups in New Zealand: the BES Standards Reference Group, the BES Māori Educational Research Advisory Group, and the BES Pasifika Educational Research Advisory Group. These *Guidelines* are available on the BES website and govern the methodological approach to best evidence synthesis development.

In 2005 the Iterative Best Evidence Synthesis Programme was formally established within the Ministry of Education and four subsequent BES iterations have been developed using the *Guidelines* and extensive engagement with stakeholders; representatives of whom have helped to manage and formatively quality assure the BES developments:

1. Effective Pedagogy in Mathematics/Pāngarau (Anthony and Walshaw 2007).
2. Teacher Professional Learning and Development (Timperley et al. 2007).
3. Effective Pedagogy in Social Sciences/Tikanga ā Iwi (Aitken and Sinnema 2008).
4. School Leadership and Student Outcomes: Identifying What Works and Why Best Evidence Synthesis (Robinson et al. 2009).

In recognition of their contribution to definitive knowledge about effective educational practices and policies the International Academy of Education has commissioned summaries of all four of the BESs generated since the formal establishment of the programme to be lodged on the UNESCO website. At the time of writing two summaries are available in English, Te Reo Māori, and progressively in other languages, at [http://www.ibe.unesco.org/en/services/](http://www.ibe.unesco.org/en/services/publications/educational-practices.html)

[publications/educational-practices.html](http://www.ibe.unesco.org/en/services/publications/educational-practices.html). These are Anthony and Walshaw (2009) on *Effective Pedagogy in Mathematics*, and Timperley (2008) on *Teacher professional learning and development*.

Perhaps the most critical finding across all of the best evidence syntheses is the effect size arising out of a meta-analysis carried out for the *School Leadership and Student Outcomes BES*, that revealed an effect of $d = 0.84$ for leadership practices involved in promoting and/or participating in teacher professional learning and development. In turn the effect sizes for the highest impact professional development in the *Teacher Professional Learning and Development BES* show effect sizes for achievement gains that are equivalent to more than 2 year's progress in 1 year across student populations, and for the 20 % of lowest achieving students the equivalent of 3–4 years' progress in 1 year. Again the qualitative data and emerging theory that explain how and why such professional development was so effective matters. Accordingly the best evidence syntheses illuminate through case and vignette what was distinctive about highly effective practice.

However, just because there is evidence about an approach making a bigger difference in one context does not guarantee that it will in another. Accordingly, the Iterative BES Programme proposes that teachers, leaders and policy makers take an inquiry mindset to using the evidence (See Fig. 27.2).

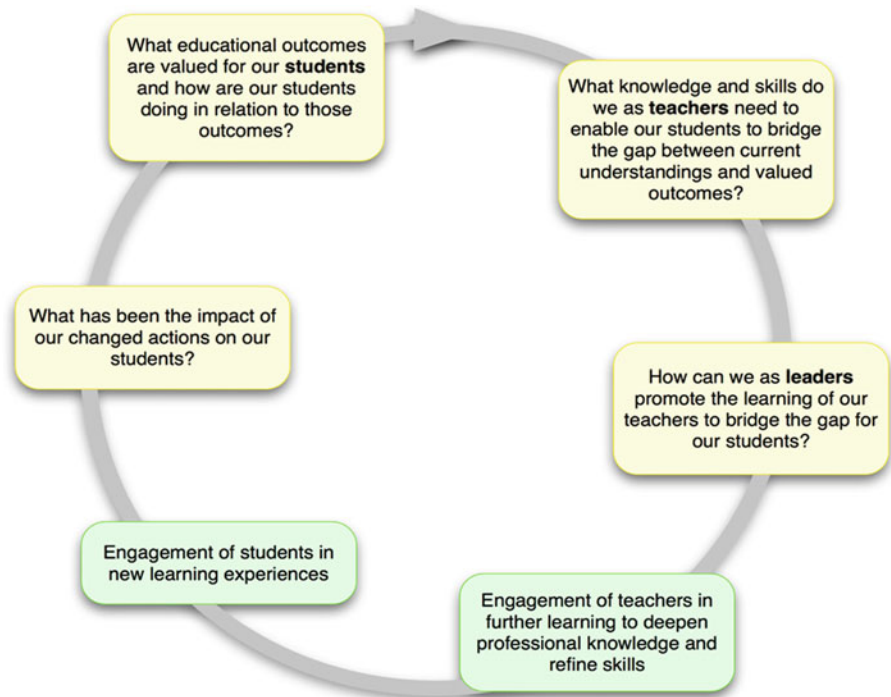
Concluding Comments

Critical to the Iterative BES approach is drawing upon a range of expertise from formative quality assurers in the research community and working collaboratively with education stakeholders. Principal and other middle leader representatives, teacher union representatives and others advise throughout BES development on how to shape the scope, usefulness, and accessibility of the best evidence syntheses, and critique work in progress. These processes provide a forum for constructive albeit heated debate and help to strengthen the quality, trustworthiness and usefulness of the syntheses. They also help to advance use of the findings through building trust and ownership with those for whom the knowledge is intended. Such ownership is represented in stakeholder forewords to the documents.

PPTA (the New Zealand Secondary Teachers' Union) welcomes this latest Best Evidence Synthesis as a significant contribution to our understanding of the role of professional learning in assisting teachers to develop their practice. . .

Robin Duff (President) PPTA
(Timperley et al. 2007, xii)

Fig. 27.2 Teacher and leader inquiry and knowledge building cycle (Timperley 2008, pp. 26–27)



Depending on the area of BES focus, meta-analyses are not always available to inform or able to be constructed to inform the comparative magnitude of impact analyses. Where they can be used, and illuminated by cases and theory, they provide an invaluable resource for educational improvement that can benefit not only students, but also teachers, and educational leaders who are able to build on what has been learned, and further advance our understanding of what makes a bigger difference in education.

Note on Contributor

Adrienne Alton-Lee is the Chief Education Advisor who leads the New Zealand Ministry of Education's Iterative Best Evidence Synthesis (BES) Programme. Her role is to strengthen the development and use of the evidence-base informing policy and practice to support systemic improvement for diverse learners in education. Dr Alton-Lee is a Fellow of the International Academy of Education. She was formerly a teacher, classroom researcher, Professor and an Associate Editor of *Teaching and Teacher Education*. She has published in leading educational journals including the *Harvard Educational Review*, the *Elementary School Journal*, the *International Journal of Inclusive Education* and *Review of Research in Education*. Dr. Alton-Lee is the author of the Ministry of Education's first BES now being revised for its second iteration: *Quality teaching for diverse learners in schooling (at best evidence synthesis iteration BES)*. BESs can be accessed at www.educationcounts.govt.nz/goto/BES.

References

- Aitken G, Sinnema C (2008) Effective pedagogy in the social sciences/ Tikanga-a-iwi: best evidence synthesis iteration. Ministry of Education, Wellington
- Alton-Lee A (2007) The iterative best evidence synthesis programme: collaborative knowledge building and use across research, policy and practice in education. In: CERI evidence in education: linking research and policy. OECD, Paris. <http://213.253.134.43/oecd/pdfs/browseit/9607081E.PDF>
- Alton-Lee A (2003) Quality teaching for diverse learners in schooling: best evidence synthesis. Ministry of Education, Wellington
- Anthony G, Walshaw M (2007) Effective pedagogy in mathematics/ Pāngarau: best evidence synthesis iteration. Ministry of Education, Wellington
- Anthony G, Walshaw M (2009) Effective pedagogy in mathematics: educational practices series 19. International Academy of Education, International Bureau of Education & UNESCO, Geneva
- Biddulph F, Biddulph J (2003) The complexity of community and family influences on children's achievement in New Zealand: best evidence synthesis iteration. Ministry of Education, Wellington
- Farquhar S (2003) Quality teaching early foundations: best evidence synthesis iteration. Ministry of Education, Wellington
- Fung I, Wilkinson I, Moore D (2003) L1-assisted reciprocal teaching to improve ESL students' comprehension of English expository text. *Learn Instr* 13:1–31
- Haig BD (2004) Methodological considerations for generating Iterative best evidence syntheses. Unpublished report prepared for the Ministry of Education. University of Canterbury, Christchurch
- Hattie J (2009) Visible learning: a synthesis of over 800 meta-analyses relating to achievement. Routledge, London
- Kelly M, Moore D, Tuck B (1994) Reciprocal teaching in a regular primary school classroom. *J Educ Res* 88(1):53–61

- Le Fevre DM, Moore DW, Wilkinson IG (2003) Tape-assisted. Reciprocal teaching: cognitive bootstrapping for poor decoders. *Brit J Educ Psychol* 73:37–58
- Mitchell L, Cubey P (2003) Characteristics of professional development linked to enhanced pedagogy and children’s learning in early childhood settings: best evidence synthesis iteration. Ministry of Education, Wellington
- New Zealand Ministry of Education Best Evidence Syntheses (BESs) (2013) <http://www.educationcounts.govt.nz/topics/BES>
- Palincsar AS, Brown AL (1984) Reciprocal teaching of comprehension fostering and monitoring activities. *Cognition Instructn* 1:117–175
- Robinson V, Hohepa M, Lloyd C (2009) School leadership and student outcomes: identifying what works and why: best evidence synthesis iteration. Ministry of Education, Wellington
- Timperley H (2008) Teacher professional learning and development: educational practices series 18. International Academy of Education, International Bureau of Education & UNESCO, Geneva
- Timperley H, Wilson A, Barrar H, Fung I (2007) Teacher professional learning and development: best evidence synthesis iteration. Ministry of Education, Wellington
- Westera J (2002) Reciprocal teaching as a school-wide inclusive strategy. (Unpublished doctoral dissertation). University of Auckland. Retrieved from <http://hdl.handle.net/2292/767>

Framing and Analysing Educational Research: A Recent History of Transactions from a Foucauldian Perspective

28

Mark Olssen

Abstract

Michel Foucault's work has had a major impact on the social sciences and a smaller, yet growing impact on studies in education. This chapter traces the influence of his work in scholarship on the internal logics and development of psychology and sociology, to illustrate its significance for understanding the production and effects of subjectivity and modern society, governance and neoliberal forms of accountability, and power and individual freedom, and hence its implications for the framings and recent analysis of research in education on these matters.

Keywords

Foucault • Educational research • Genealogies of education • Personal autonomy and education • Neoliberal governmentality

Introduction

Michel Foucault's work has had a major impact on the social sciences and a smaller, yet growing impact on studies in education. This chapter traces the influence of his work in scholarship on the internal logics and development of psychology and sociology, to illustrate its significance for understanding the production and effects of subjectivity and modern society, governance and neoliberal forms of accountability, and power and individual freedom, and hence its implications for the framings and recent analysis of research in education on these matters.

Twenty years ago, James Marshall could note that "educationalists had little to say" on this impact (1989, p. 98). In reviewing the works influenced directly by Foucault, Marshall referred to studies by Jones and Williamson (1979); Hoskin (1979), as well as the critical psychology of Henriques, Hollway, Urwin, Venn and Walkerdine (1984). In the few years after Marshall made this observation the situation

began to alter. Publications by Anyon (1991), Aronowitz and Giroux (1991), Ball (1990a, b, c), Burchell et al. (1991), Britzman (1991), Cherryholmes (1988), Davies (1989), Edwards and Usher (1994), Goodson and Dowbiggin (1990), Gore (1994, 1998), K. Hoskin (1979), R. Hoskin (1990), Hoskin and Macve (1986), Hunter (1996), D. Jones (1990a), R. Jones (1990b), Jones and Ball (1995), Knight et al. (1990), Lather (1991, 1996), McLaren (1991), Marshall (1990, 1995, 1996a, b), Miller (1990), Pagano (1990), Olssen (1993), Varela (1983), Varela and Alvarez-Uria (1991), Veyne (1997) and Walkerdine (1984), to name just some, established a veritable explosion of works influenced by Foucault or by post-structuralism generally. Indeed, throughout the 1990s, the influence of Foucault and post-structuralism on education continued to grow, affecting almost every area of study, although Marshall's observation that "it is far from clear that the theoretical radicalness of the work has been grasped" (1989, p. 98) would still seem to be relevant, some two decades years later. In addition, notwithstanding an increasing volume of literature, in many places Foucault's ideas are still marginalised within the mainstream discourses of educational scholarship.

Many of the works that appeared in the late 1980s and early 1990s relating Foucault to education simply sought to

M. Olssen (✉)
Department of Politics, University of Surrey, Surrey, UK
e-mail: m.olssen@surrey.ac.uk

explain the relevance of Foucault's distinctive orientation to education, or of post-structuralism generally (e.g. Cherryholmes 1988, or Marshall 1989). Others sought some sort of integration of synthesis between post-structuralism and critical theory (Anyon 1991; Aronowitz and Giroux 1991; Lather 1991; Ellsworth 1989), proposing post-structuralism as a theory of emancipation towards a more equitable society. The appeal of Foucault, as of other post-structuralist writers, was that he problematised the meta-narratives of the enlightenment and advocated the possibility of treating all knowledge, including scientific research in education, and all forms of pedagogy, including evidence-based practice, as *contingent, specific, local and historical* (see Aronowitz and Giroux 1991, p. 81). His work also permitted the realisation of historically constituted forms of knowledge and pedagogy as 'regimes of truth' without resorting to 'top-heavy' critical meta-narratives such as Marxism (Gore 1998). More recent works in the period from 1998 to 2005 sought to expand the horizon, applying Foucault's approach to both substantive and methodological issues in research in education (see Baker 2001; Baker and Heyning 2004a, b; Biesta 1998; Bratich et al. 2003; Butler 1993, 2004; Chouliaraki and Fairclough 1999; Dean and Hindess 1998; Drummond 2000; Dussel 2004; Edwards 2002, 2003; Edwards and Nicoll 2004; Erevelles 2002; Fendler 1998; Gale 2001; Gore 1998; Gray-Rosendale 1999; Hammerberg 2004; Harwood and Rasmussen 2004; Hultqvist 2004; Kirk 1998, 2004; Larrosa 1995; Lather 2004; Marshall 2001, 2003, 2004; McWilliam 2004; Middleton 1998; Mourad 2001; Olssen 1999, 2003; Olssen et al. 2004; Papastephanou 2001; Peters 2000, 2001; Popkewitz and Brennan 1998; Popkewitz et al. 2001; Popkewitz 2004; Seals 1998; St. Pierre 2004; Tamboukou 2000; Tikly 2003; Toll and Crumpler 2004; Varela 2001; Weems 2004).

Of more recent note has been an issue of *Educational Philosophy and Theory* (Volume 38 (4), August 2006), titled 'The Learning Society from the Perspective of Governmentality,' edited by Jan Masschelein, Maarten Simons, Ulrich Bröckling and Ludwig Pongratz (2006), and with contributions by Maarten Simons and Jan Masschelein (2006a), Thomas Popkewitz, Ulf Olsson, and Kenneth Petersson (2006), Anna Tuschling and Christoph Engemann (2006), Ludwig A. Pongratz (2006), Andrea Liesner (2006), Kerlijn Quaghebeur (2006), Ulrich Bröckling (2006), Maarten Simons (2006), Norbert Ricken (2006), and Jan Masschelein (2006).

An even more recent publication titled *Foucault and Lifelong Learning: Governing the subject*, edited by Andreas Fejes and Katherine Nicoll, was published in 2008, by Routledge. This has contributions by scholars throughout the globe, including, Richard Edwards; Mark Olssen; Maarten Simons and Jan Masschelein; Ulf Olsson and

Kenneth Petersson; Thomas S. Popkewitz; Andreas Fejes; Marinette Fogde; Per Andersson; Gun Berglund; Helene Ahl; Katherine Nicoll; Nicky Solomon; Katarina Sipos Zackrisson and Liselott Assarsson; and Gert Biesta (all 2008). Clearly the Foucauldian approach to research is in good heart, and looks like being here to stay. Supporting this contention, in October 2012, renowned education policy scholar, Stephan Ball (2012) has authored a new book, titled *Foucault, Power and Education*, to be published by Routledge. This is a veritable minefield of new Foucauldian ideas and insights as they affect education policy, education sociology, important themes to do with psychology, eugenics, disability, and also considers important aspects of Foucault's project related to subjectivity, ethics, and aims to "rewrite education policy as a history of *practices, and truths and subjects, and of relations of power and of government*" (p. 152).

Foucault and Educational Psychology

To begin to trace this approach, in terms of educational psychology, we can start by noting the relevance of the study by Henriques, Hollway, Urwin, Venn, and Walkerdine (1984). This explored the way in which psychology is involved in particular constructions of the individual and society. After mapping effects of nineteenth century individualism on psychology, the authors seek to demonstrate, utilising Foucault and other poststructuralist thinkers, the way educational psychologies such as those of Piaget contribute to the normalisation and surveillance of children. Much of the problem, it was argued, stems from the ontological conception of the individual which results from a certain model of individual and society relations that had dominated the Victorian context out of which psychology developed. Such a model of the person warps both psychology's development as well as its operations. In order to correct the individualist bias of western psychology, the authors sought to explore the applicability of various sociological theories in their attempt find a more appropriate model of 'individual-society' relations as a basis to the discipline. Rejecting Marxist theories as being too 'totalistic', focusing on structures of the economy as mechanically determining individuals responses and actions in a rigid way reflecting class interests, the authors utilise Foucault, and other poststructuralists in order to represent individuals as constituted by dispositifs of discourse/practices with multiple sites of origin.

Also with respect to educational psychology, some of my own work (Olssen 1993) utilises Foucauldian theory in order to throw light on the origins of educational psychology by tracing it as a particular discourse to its emergence in the nineteenth century. My aim was to trace the way that

educational psychology, like psychology in general, contained deep within the 'hard core' of its scientific research programme the political ideology of seventeenth to nineteenth century individualism. This derived from three sources: (1) from political and economic liberalism, emerging in the seventeenth century, (2) from the epistemological emphasis on methodological individualism, emerging in the sixteenth and seventeenth centuries, and (3) from the sciences of biology and evolution as they developed in the late eighteenth and nineteenth centuries. In each of these three areas, specific proposals (political obligation, scientific method) confounded various senses or forms of individualism – descriptive, moral, political – asserting what in essence was a *metaphysic of individualism* against the more social and communitarian metaphysic of the *ancien regime*. The implication of this was to fashion a conception of the individual as 'owner and creator of his own capacities' (Macpherson 1962), a conception which privileges *nature* over *nurture*, and which Foucault contends is fallacious in terms of both ontology and psychology. Yet without this conception of the 'possessive individual', sciences like mental testing and individual difference psychology would never have got off the ground or become institutionalised as powerful forms of technical control within western education systems during the twentieth century. Sciences like mental testing and educational psychology defined new ways of relating to the world, new means of administrative control, new ways of defining and talking about people, etc.; in short, new means of normalisation and surveillance by which order and discipline in modern western nations is made effective. Through these new sciences, individual human subjects were represented in biologically essentialist terms, and societies were depicted as 'reflecting' or 'adapting to' the real natures of their citizens. The doctrine of ontological individualism in which the human subject was represented as 'pre-social', because of its dominance in European culture at the end of the nineteenth century, made possible the emergence of such a discipline as educational psychology and which in turn has major consequences for its development as an empirical science. Put another way, the emergence of educational psychologies in the second half of the nineteenth century reflected the cultural and political postulates of Benthamite individualism, and stood in something of a contradiction to the tide of collectivist thinking which became ascendant in the final decades of the nineteenth century. The cultural individualism which gave rise to policies of social amelioration based on self-help and individual enterprise were a central consequence of the enlightenment prioritising of the individual as the foundation stone of political and civic obligation. Rather than see individuals as perfectible only in the context of a society, as had been maintained by leading thinkers from the time of ancient Greece to the seventeenth

century, with the enlightenment faith in subject-centred reason came the view that we can understand individuals only by perfecting individuals. Similarly, the view that we can understand individuals only by understanding the form of society in which they live became replaced by the contention that we can understand society only through an understanding of its individual members.

As I also pointed out, although a Foucauldian approach to psychology might well support a 'limited programme', as Wundt originally proposed, confining psychology to neuroscience, the study of 'higher mental faculties' would be left to history and sociology. As I stated:

Consistent with developing lines of thought in Germany, Wundt viewed the scope of human experimental psychology as distinctly limited. Believing that mind was a social phenomenon, he agreed with his contemporary, the sociologist Durkheim, that the social was not reducible to the individual and that the best way to study the concepts of consciousness was through the study of what Durkheim called "social facts" – myths, traditions and customs.

(Olssen 1993, p. 157)

In the nineteenth century Marx and Durkheim both took the view that society is independent to individuals and that individual mind is socially and historically constructed. Against those theorists who argued that the individual is 'pre-social' or biologically constituted, Marx argued that the individual is *always already social*: that is, the individual is a social being from the first. As he summed it up in the preface to *A Contribution to The Critique of Political Economy*, "it is not the consciousness of men that determines their existence, but their social existence that determines their consciousness" (Marx 1971, p. 21). The dual position with respect to the ontological privileging of individual or society is clearly expressed in this quotation.

Durkheim (1933) also claimed the importance of society over the individual, arguing that no study of the individual can give us an understanding of society. In his *Rules of Sociological Method* (1933) he argued that, although society is made up of individuals, it is different and distinct from the component parts. If we think of language, or marriage, or of the various legal or moral codes in the world then it becomes clear, argued Durkheim, that by studying the individual person we could never come to an understanding of such institutions. Yet without studying these structural features of society we cannot understand the individual either. By the term 'social', Durkheim is referring to those 'general' or 'collective' dimensions of reality as they are expressed in patterns or structures. Certain ideas or value systems, such as Christian thought for example, can be found throughout society and persist for a long period of time, in many cases more enduring than the individual members of the society. They were there before the individual was born and will be there after he or she is dead. When the individual comes into the world, 'reality' in the form of language, belief systems,

schooling, etc. is already constituted. It is not an immutable natural state of affairs but is historically constructed and is different in different societies. Durkheim maintained, in fact, that even something as intimately personal as suicide was a social rather than a psychological phenomenon. In his study on suicide, Durkheim argues and presents evidence for the hypothesis that the cause of suicide is the degree of social and moral integration of the society: it was not something that could be explained by looking at individuals.

The ontological priority of the individual was reinforced by a broad spectrum of social and political theory and is closely tied to social, economic and political changes from the sixteenth century onwards. The Reformation and the attendant Protestantism gave rise to a new spirit of individualism whereby each individual could communicate directly with God and was solely responsible for his or her salvation. With the expansion of empire, the growth of science and the enlightenment belief in progress, the idea that the individual was master of their fate was further encouraged. Partly this was inspired by the successful methods of the physical sciences which employed mathematical laws, measurement quantification, and based itself on a metaphysics of atomism, reducing complex physical phenomena to its smallest component particle. Believing that the social world could be studied in the same way was to generally endorse the search for the truth of life in the individual.

Classical liberal individualism encompassed all aspects of life. In *The Wealth of Nations*, published in 1776, Adam Smith sought to explain *laissez-faire* capitalism as a consequence of the natural competition of the individual in very much the same way, with respect to basic postulates, that Darwin later sought to explain the processes of natural selection at work in the origins and evolution of species. In political philosophy John Stuart Mill was to frame a political conception of liberty to safeguard political freedom within a *laissez-faire* approach to capitalism. Others such as Jeremy Bentham and Herbert Spencer were to legitimise ‘non-intervention’, ‘individual liberty’ and ‘unregulated competition’ as being part of the *natural order of things*, reinforcing what was an ascendant view of society as a consequence of solely individual initiatives.

Macpherson (1962) has described the strain of thought in his book, *The Political Theory of Possessive Individualism*, and describes how, through a variety of thinkers from Thomas Hobbes to John Stuart Mill, English political and social thought from the seventeenth century to the nineteenth century is characterised by the idea of possessive individualism. This idea, says Macpherson, became axiomatic to liberal democratic thought and to scientific movements. In the nineteenth century it became an underlying and unifying assumption. Its ‘possessive’ quality is found in the condition of the individual as essentially the proprietor of his or her own person or capacities, owing nothing to society for them.

Thus for theorists such as Hobbes, Locke, Adam Smith, Herbert Spencer, Bentham, Mill, Galton, the individual ‘pre-figures’ society and society will be happy and secure to the extent that individuals are happy and secure. Not only does the individual own his/her own capacities but also, more crucially, each is morally and legally responsible for him or herself. Freedom from dependence upon others means freedom from relations with others except those relations entered into voluntarily out of self-interest. Human society is simply a series of market relations between self-interested subjects. For Adam Smith it is guided by an ‘invisible hand’. For John Locke society is a ‘joint stock company’ of which individuals are shareholders.

Paradoxically, while the impact of individualism was dominant in relation to social, political, educational and scientific ideas of the late nineteenth, early twentieth century, this period actually marked a major extension of the state’s authority over every aspect of the individual’s life and to every corner of society. The problems of urbanisation, population increases, immigration, war and a major concern with eugenics (MacKenzie 1979) gave rise to an increasing concern with regulation and control, leading to the state’s encouragement for various forms of social research (see Abrams 1968).

Notwithstanding this paradox, the impact of classical liberal individualism on psychology was secure. It can be summed up with reference to several features. Psychology took the individual as a unitary rational actor and as the primary object of investigation. *It was a science of the single case abstracted from culture*. In that social factors were important at all, they were simply seen as contaminating influences.

Biologism was one form of individualism and was central to the psychologies of individual differences and Freudianism. In individual difference psychology almost no social influences were acknowledged at all, the genetic structure of the individual being seen as determining behaviour and capacity in all important respects.

In Freud’s theories, while environmental factors could act to affect development, the derivation and nature of development was determined by biologically shaped drives. The role of society was to serve to repress and constrain, and ultimately channel, these drives into socially useful activities. Freud’s implicit theory of social structure was premised on the idea of conflict and aggression between individuals. In this sense he had a similar view of society to that held by Thomas Hobbes: a zero-sum model of competition and mutually excluding trade-offs between individuals motivated by chaotic psychic energies (Ingleby 1987).

Cognitive developmental psychologies accorded biology a less direct role but still conceptualised the individual as a unitary rational actor, seeing ‘behaviours’, ‘attitudes’, ‘emotions’, ‘language’ and ‘dispositions’ and so on as things

in the individual and part of the individual's cognitive makeup. Development was seen as a consequence of *inner mechanisms*. Capacities were seen as individual and as logically distinct from social processes. Without a social perspective cognitive psychology distorted the notion of development reducing it to a series of cognitive rules.

Behaviourism was another form of individualism. Although the behaviourists rejected biology, stressing the environmental determination of behaviour, the approach was still in accord with the dictates of methodological and liberal individualism. It was, in fact, the psychology of the single case *par excellence*. The focus was still upon the individual as logically distinct from culture (Ingleby 1987). While individual dispositions could be modified by the environment, the nature of dispositions remains located firmly inside the child's immediate environment and this, as Ingleby puts it, "occludes social structure as effectively as the hereditarians" (Ingleby 1987, p. 299). In fact, there was no recognition of structural or collective aspects of culture or society as impacting on individuals' lives at all.

In this sense, from a Foucauldian perspective, psychology is inadequate for the task of explaining the social nature of development. This is because it is premised upon a fallacy in ontology constituted in modernism in terms of an episteme which excluded the possibility that an individual subject could be understood in terms of the externality of the structures of the social world. For Foucault, psychological science can be seen as a discursive formation which produced new categories and classificatory systems which became inscribed in the practices and organisational structures of daily life. In addition, it invented new concepts – 'intelligence', 'behavioural problem', 'reinforcement schedule', 'hyperactivity', 'ego control', the 'unconscious', 'stages of development', 'child-centred pedagogy', 'means analysis', 'scaling', 'normal development', 'slow development', etc. – which became in Foucauldian terms deeply implicated in producing the very reality that they claimed to discover. Hence the discourse of psychology formulates a way of organising the world, and in doing so it positions people in relation to the categories and classifications it constructs.

Nikolas Rose (1996) argues that the psy disciplines – psychology, psychiatry, psychotherapy, psychoanalysis – which emerged as technologies of power in Europe and North America since the mid nineteenth century were not only "connected in an important way with transformations in forms of personhood – our conceptions of what persons are and how we should understand and act towards them" (p. 11) – but also intrinsically linked to transformations of political power in liberal democracies. He asks:

Why, if human beings are as heterogeneous and situationally produced as they now appear to be, did a discipline arise that promulgated such unified, fixed, interiorized and individualized conceptions of selves... Whose interests did such an intellectual project serve? (p. 9)

He answers provisionally:

The history of the psy disciplines is much more than a history of a particular and often somewhat dubious group of sciences – it is part of the history of the ways in which human beings have regulated others and have regulated themselves in the light of certain games of truth... the regulatory role of psy is linked... to questions of the organisation and reorganisation of political power that have been quite central to shaping our contemporary experience. The history of psy, that is to say, is intrinsically linked to the history of government. (p. 11)

Genealogies of Education

In recent years there have been a number of more substantial analyses utilising Foucauldian approaches to educational issues. Julia Varela (1983, 2001) extends the notion of genealogy in Foucault with insights from Marx, Weber, Durkheim and Norbert Elias.¹ Genealogy, says Varela, constitutes a form of general history which breaks with both the essentialised and the psychological subject and seeks to "situate processes historically... to understand the logic behind their internal development" (2001, p. 109). For Varela, genealogy seeks to fight against "the coercion of a unified formal and scientific theoretical discourse" (p. 110). It is "a means of regulating the effects of power derived from theories defined as 'scientific' in order to eliminate the tyranny of global and globalized discourses that were established with their particular privileges and institutional hierarchies" (p. 110). Varela identifies a number of core features of genealogical method containing insights from Foucault mixed with insights from Elias and the classical sociologists.

In her view, genealogical method focuses on "processes in two senses": firstly, short-term processes of social change, and secondly, processes of long duration. It aims to "decipher the internal logic by which a field functions to understand its internal dynamics" (p. 111). In doing this it seeks to identify interdependencies between levels of analysis. As knowledge is always related to power, it is never wholly 'pure', or completely 'contaminated'. What the genealogist must do is seek to reconstruct the play of interactions that exist between power and knowledge in a specific field and at a specific historical moment (p. 111). Genealogists, she says, echoing Foucault, do not just operate on an "ascending analysis of power relations" in order to explain how disequilibriums of power, or in certain cases domination, were established. In this sense, it is necessary to re-examine conceptions of power and freedom. As she says, "there is no such thing as an absolute absence of power or of freedom,

¹ Varela refers to Elias (1978, 1982, 1987) and others.

but rather specific distributions of power and freedom, which must be seen in terms of shades and nuances” (p. 112).

In developing her argument, Varela accentuates the “imbrications” between knowledge, power and subjectivization, which she notes operate in both Foucault and Elias. In Foucault’s major studies, such as *The History of Sexuality, Vol. 1* (1976), she notes how Foucault (1976) seeks to understand relations between games of truth, practices of power, and forms of subjectivization. Genealogy critiques “specific forms of rationalization” (p. 112), and thus must distance itself from dominant models. As no universal rule underpins sexual identity, as with identity in general, understanding it depends on specific techniques at specific times and places. Varela’s own analysis is developed through an examination of Foucault’s study of disciplinary power in which he focuses on educational institutions in relation to the founding of a certain type of power. Hence in *Discipline and Punish*, Foucault (1975) focuses on the microphysics of power examining Jesuit teaching. The aim is to link micro and macro levels of power, seeking to clarify relations. Varela points out that the Foucauldian model puts emphasis on the “productive functions” of the school, as opposed to its reproductive mechanisms which breaks from the model of determinism as exemplified by Bourdieu and the Marxist reproduction theorists. Institutions thus construct originality while at the same time reproducing existing relations of power. There is a simultaneous constructivist/reproductive process where neither pole can be entirely absent and where the precise relation of each is empirically variable in different times and places. In such a model, says Varela:

The school is thus a space where new procedures and technologies for exercising power can be tried out. It makes possible the emergence of a new political anatomy of the body, in that by training subjects it gives them capacities, aptitudes, and so forth. It is also a new physics of power, in that it permits the articulation of power in the search to maximize its strengths – creating in summation, a new economy of pleasure.

(Varela 2001, p. 116)

Because power, for Foucault, is created historically and utilizes specific techniques of creating subjects, it also individualizes and thus permits resistance against forms of subjectivization, forms of identity, and structures of incarceration. Varela’s own study (1983) identifies and analyses various technologies of governing children:

in a relational and comparative way, making use of the new concept of modes of education, the manner in which different ways of governing children of a tender age ... were put into place. Distinct ways of governing young children, which could be defined only in relationship to each other, were interconnected with a whole series of transformations linked fundamentally to the formation of the modern state, as well as to struggles to obtain social harmony, and to the imposition of religious orthodoxy, as part of efforts to establish religious hegemony.

(Varela 2001, pp. 119–120)

To examine the means of governing as constitutive of identity at particular historical moments is suggestive of the wide applicability of Foucault to educational and social historical research.

Parallel work on Foucault and education has been carried out in Australia by Ian Hunter (1994, 1996), who stresses the distinctiveness of Foucault’s approach to the school as an apparatus for the social determination of subjectivity. For Foucault, says Hunter, historical phenomena are seen to emerge not as realisations of underlying principles or developmental laws but as contingent assemblages put together under ‘blind’ historical circumstances. Foucault would not be concerned with education in reproducing labour power or ideology, says Hunter (1994, p. 47), in a way that echoes Varela, but rather with the effects of the school through a variety of technologies of domination concerned with the disciplinary organisation of the school: special architectures; devices for organising space and time; body techniques; practices of surveillance and supervision; pedagogical relationships; procedures of administration and examination. Foucault thus forces us to consider that it is not educational principles but school premises and modes of organisation that are important for understanding the constitution of subjectivity. And rather than representing the school simply as an agency of reproduction, for Foucault it is a form of disciplinary and bureaucratic governance which both reproduces and constitutes identity.

Foucault’s project, like those of Hegel, and Marx before him, has been to challenge Kant’s presumption of the “morally ultimate character of self-reflective personhood” (Hunter 1996, p. 149), seeking instead to historicise Kant by tying the development of the person to that of society and seeing it as an effect of society. In this Foucault rejects both the Kantian, as well as the Hegelian-Marxist view of the formation of the subject. The subject is neither ‘self-reflective’ or self-determining, as in Liberalism, nor ‘incorporable’ to history or class, as in Marxism. Rather, says Hunter, Foucault focuses on the specific disciplined practices of the self, which already exist in the culture and which are imposed through socialisation, but through which individuals become ‘ethically self-concerned’ and seek to compose themselves as subjects of their own conduct (p. 158). Thus for Foucault reflective action is understood as a particular practice of the person. The models are not invented from nothing but derive from the spiritual disciplines of the Greco-Roman and Christian cultures of the west – stoic self-testing, Christian interrogation of the flesh, the Catholic confessional, Protestant self-examination, sexual austerity, fasting – these are all inventions for taking an interest in ourselves as subjects of our own conduct.

From Foucault’s viewpoint, says Hunter (p. 159), it is necessary to give up the idea that the subject might freely choose its own form “through a rational inspection of moral

principles or competing versions of the good life". Freedom is only possible with regards to individual action only after conduct has undergone moral problematisation, but individuals cannot freely choose the form in which they will undergo problematisation. Individuals rather will be subject to dominant modes of the culture, and Hunter draws on Weber's (1930) account of the rise of the Protestant ethic in the sixteenth and seventeenth centuries in order to provide a Foucauldian description of the exercise of spiritual training of the population. Fundamental to this was the transfer of power of ethical determination from the priesthood to the population. Such a transfer involved the systematic use of devices for mass spiritual problematisation. Hunter notes in particular the doctrine of predestination which he claims destroyed the certitude of salvation and encouraged the transmission of particular forms of ethical labour – practices of self-watchfulness, self control, special forms of devotional reading and writing – through which the faithful reassured themselves of their own ethical standing: "The result was a profound individualisation of Christian spirituality as ordinary members of flock were inducted into a practice of ethical life that made them 'personally' responsible for their own salvation" (p. 159).

Based on such an analysis, Hunter suggests that a Foucauldian approach reinstates Weber against Marx.² Rather than State schooling being represented as an expression of the interests and capacities of class politics, it must be seen instead, as the outcome of technical faculties of administration, and as a vehicle for the transmission of pastoral pedagogy. It was through Christian pastoralism that the school disseminated the comportment of the self-reflective person, via a pedagogy of moral subjectification. Through a piecemeal series of exchanges between the state, and the Christian pastorate, the school – through its architecture, pedagogy, and administration – became employed as an instrument of social governance of citizens and the spiritual disciplining of souls.

Genealogy can also trace the lines of descent and emergence in relation to institutionalised discursive systems, and the messy interactions in terms of power and knowledge that have shaped the structure of the present. In this sense, particular disciplines of knowledge are ripe for genealogical investigation, along the lines of Nikolas Rose's (1985) early work *The Psychological Complex*, or his later work (Rose 1996) *Inventing Ourselves: Psychology, power and*

personhood, which trace (albeit in somewhat different ways) the history of psychology in relation to nineteenth century epistemological and social beliefs concerning knowledge and society. In addition, Ian Hacking's (1995) *Rewriting the Soul*, although a critique of 'multiple personality theory', in psychiatry, is also illustrative of what can be done in relation to educational concepts and ideas such as 'intelligence' or 'mental testing', 'psychotherapy' or 'counselling', or the various forms of assessment or classification, or even the economic discourses that have guided neoliberal restructuring, such as public choice theory, total quality management, or human capital theory.³ Also, in Law, François Ewald's (1986) *The Providence State* targets the philosophy of law in a way similar to which Foucault targets psychiatry.

Foucault and Personal Autonomy

In a number of papers and books spanning several years, James Marshall (1989, 1990, 1995, 1996a, b) has presented a Foucauldian analysis of liberal education principles focusing upon (1) personal autonomy, (2) notions of identity, (3) the adequacy of the liberal concept of autonomy, and (4) the notion of the improvement or progress of human beings through education or in society.

Maintaining the Foucauldian thesis that the *autos* or self has been constructed politically by power-knowledge, Marshall critiques the view that education is involved in the pursuit of personal autonomy, or that rational autonomy is the aim of education. For Foucault, says Marshall, the pursuit of personal autonomy in such Enlightenment terms is a social construction and is destined to fail because it masks the fact that any such persons have been constituted by political acts. As he puts it (1996a, p. 113), "the notion of a self able to deliberate upon and accept laws so as to act autonomously as opposed to following laws heteronomously is a fiction, furnished upon the western world post-Kant as the basis for moral action but, for Foucault in the cause of governmentality". Rather, for Foucault, says Marshall, our conception of ourselves as autonomous is an illusion, and he argues that liberal educators like Strike, Dearden and Peters who advocate personal autonomy as a fundamental aim of education do not understand how modern power, through the technologies of domination and the technologies of the self, has produced individuals who are governable. For Marshall,

²The extent to which this is so would need substantial qualification. Foucault certainly shares an interest in rationality as a form of power with Weber, but is not a methodological individualist in the same way. There is a sense in which Foucault cuts between Weber and Marx, for he would arguably side with neither in the classic debate over whether religion or the economy was the motive force shaping capitalism, in preference for seeing such effects as the outcome of complex mix of discursive (ideal) and extra-discursive (material) forces.

³ Doctoral students I have been associated with have completed theses on psychological and psychiatric concepts and theories as well as neoliberal economic theories and concepts, such as 'public choice theory'.

the very concepts which we use to construct our identities are such as to make independence and autonomy illusory. Hence education via governmentality effects the production of a new form of subject – one who believes they are free. Such an education simply introduces a new form of social control and socialisation and new and more insidious forms of indoctrination where a belief in our own authorship binds us to the conditions of our own production and constitutes an identity that makes us governable. In that selves do emerge it is as pathologised into certain types of human beings which are discursively constructed.

The human sciences have been pivotal here as technologies of the self in the construction of human subjects as autonomous. The human sciences have produced knowledge about man during the period of the Enlightenment. This, says Marshall, entails a ‘messy involvement’:

Man enters the scene as both speaking subject and as an object that is spoken about. As speaking subject, Man represents the very conditions of possibility of content knowledge about the object man. Foucault argues that Man as subject in the human sciences has a continuous messy involvement in knowledge about the object Man. Or, to put it another way, whereas the very conditions for the possibilities of knowledge should be separate from the contents of knowledge, or that there should be a dividing line between the transcendental and the empirical, Foucault believes that in the human sciences they are not and *cannot* be so divided.

(Marshall 1996a, p. 120)

As Marshall (1996b, p. 83) puts it, “to believe that personal autonomy in modern times is liberating is mistaken – according to Foucault. . .its pursuit leads to unfreedom”. According to Marshall, “from Foucault’s perspective the political has become *masked* and the true nature of this alleged autonomy and its role in governmentality hidden” (p. 85).

In a related sense, utilising Foucault’s concept of governmentality, Marshall (1995, 1996a, b) and Peters and Marshall (1996) examine the neo-liberal notion of the autonomous chooser as embodying a particular conception of human nature, as a model of the security of the state, and as a particular model of surveillance and control. Focusing upon the massive changes in political policies regarding education, as well as other social services, which have taken place in New Zealand since 1987, Peters and Marshall develop a Foucauldian analysis of the reforms in terms of notions such as ‘choice’, ‘quality’, ‘freedom’, and ‘autonomy’. In a way similar to his analysis of autonomy as a liberal educational goal, what is presupposed in the notion of the ‘autonomous chooser’, says Marshall, is that the notion of autonomy needed to make choices and the notion of needs and interests entailed as a result, have not been manipulated or imposed in some way upon the chooser, but are the subject’s own. A Foucauldian critique rejects such a possibility.

My own work (Olssen 2004, 2005) in critiquing autonomy supplements and extends Marshall’s arguments. In two articles, I have focussed on the works of two American liberals, Rob Reich (2002) and Meira Levinson (1999) who both advocate a normative political and educational thesis in order to justify liberal political and educational arrangements based on a foundational conception of ‘personal autonomy’. Unlike Kant, they both acknowledge that autonomy cannot refer to a transcendental conception of reason or cognition uninfluenced by social and historical circumstances,⁴ but seek to represent it as a goal or end to which education should aspire in the development of individual citizens, i.e., by making them *autonomous*. My own arguments challenge the extent to which it is meaningful to represent individual lives as independent from others and from the structures of social support, even when individuals are mature or developed to the highest level of their capabilities. Such a conception essentially propagates the myth of the ‘self-starting’ individual who is largely responsible for themselves and understates – indeed almost fails to acknowledge at all — the social factors in development and stability. Although both Reich and Levinson seek to moderate the claims by which autonomy means independence, and even, in Reich’s case, seeks to ‘square’ autonomy with the ‘embedded’ theory of selfhood, both in my view remain confused between the personal conception of autonomy as independence and the normative political work that they expect of the concept in order to justify certain political and educational arrangements.⁵ For Foucauldians, as reason cannot be independent of social existence, the question of how the heteronomous self can attain some degree of maturity of judgement, some ‘footholds’ in relation to the exigencies of life, some relative sense of security in a world of dangers, is what is at centrally at stake. None of this creates autonomy however, for autonomy is precisely what human beings *do not have and cannot hope to attain*.

⁴ Kant (1929, A534/B562) says: “There is in man a power of self-determination, independently of any coercion through sensuous impulses”. It was in the sense that it was independent of experience that determined it as autonomous, and it is in this sense that autonomy, for Kant, was tied to a ‘pre-social’, historical and metaphysical conception of the person. For in Kant’s view an individual can reason independently of social and historical locatedness. For both Reich and Levinson, it is not the autonomy of reason in Kant’s sense, but the overall character and course of a life that is “autonomous”. However, neither specifies precisely how ‘critical judgement’ which both continue to see as a hallmark of autonomy is compatible with a heteronomous conception of self (Olssen 2006).

⁵ In Olssen (2005), I discuss in early part of the paper the different functions and meanings that the concept takes on. These include personal, psychological, medical, ontological/metaphysical, judgmental, and cognitive/rational.

Like others who advocate autonomy (Dworkin 1988), the thesis of Reich and Levinson conceals an implicit argument for further limitations of the state's role in co-ordinating collective aspirations and goals, and in concealing inequality, which is a direct (but often unstated) effect of policies of individualisation and privatisation, as well as in accentuating 'responsibilization' of individuals and families as a general strategy of governance. In this sense the advocacy of autonomy is in accord with neoliberal governmentality. On the 'individualization-totalization' spectrum, it can be said that to advocate autonomy as an educational aim, in fact, undermines the traditional welfare state, as well as all other strategies of collective action which are necessary to human survival and well-being.

Neo-liberal Governmentality

In their 'studies of governmentality', Maarten Simons and Jan Masschelein have approached several fragments of the educational present: quality assurance in education (Simons 2002; Masschelein and Simons 2002, 2005; Simons and Masschelein 2006b), lifelong learning (Simons 2006, 2007; Simons and Masschelein 2008), learning society (Masschelein et al. 2007; Simons and Masschelein 2007), inclusive education (Masschelein and Simons 2005), feedback and information (Simons 2007), and learning environments (Masschelein and Simons 2007). A central feature of these studies is their critical scope derived from the Foucauldian 'ontology of the ourselves' or 'ontology of the present', and leading to take 'what we are willing today' as a point of departure of critical studies: our current will to quality, will to learn, will to be included, will to have feedback, will to be informed, etc. In their studies they aim at displacing this willingness, and at the same time exploring alternative ways to think about education and pedagogy. That is explored in several complementary studies: the ethos of critical research (Simons et al. 2005), education as exposure (Masschelein and Simons 2002, 2006) and the pedagogic dimension of truth-telling (Simons and Masschelein 2007).

In a variety of articles, Michael Peters (1992, 2001, 2003, 2005) has applied Foucauldian notions of governmental reason to assessing contemporary neo-liberal models of governance in education. In his book *Poststructuralism, Marxism and Neoliberalism*, Peters (2001) summarises the applicability of Foucault to neoliberalism, governance and welfare in terms of the effects on educational restructurings over the last 30 or so years. Peters explains that the preference for a Foucauldian approach for him lies in the fact that it:

avoids interpreting liberalism as an ideology, political philosophy, or an economic theory to reconfigure it as a form of governmentality with an emphasis on the question of *how* power is exercised. Second, such an approach makes central the notion of the *self-limiting* state, which in contrast to the administrative (or "police") state, brings together in a productive way questions of ethics and technique, through a "responsibilization" of moral agents and the active reconstruction of the relation between government and self-government. Third, it proposes an investigation of neoliberalism as an intensification of an economy of moral regulation. . . . Fourth, [it] enables an understanding of the distinctive features of neoliberalism. It understands neoliberalism in terms of its replacement of the natural and spontaneous order characteristic of Hayekian liberalism with "*artificially* arranged or contrived forms of free, *entrepreneurial* and *competitive* conduct of economic-rational individuals" (Burchell 1996: 23) And further, it understands neoliberalism through the development of "*a new relation between expertise and politics*" (23), especially in the realm of welfare, where an actuarial rationality and new forms of prudentialism manifest and constitute themselves discursively in the language of "purchaser-provider", audit, performance, and "risk management".

(Peters 2001, p. 73)

The distinctiveness of Foucault's approach, says Peters (2001, p. 74), resides in his notion of governmentality as a form of reason of state, which occurred for the first time in the late sixteenth and early seventeenth centuries and was based on the understanding that "the state is governed according to rational principles which are intrinsic to it" (Foucault 1991, p. 97). According to Peters, Foucault's problematic is centrally "on the question of *how* power is exercised" (Peters 2001, p. 75). In this the state cannot be considered as a unity or singularity based upon a certain narrow functionality, but must be understood in terms of its *complexity* and its *techniques*.

Peters (2001, pp. 76–77) also recounts the tensions and ambiguities that surround interpretations and appropriations of Foucault's works in different countries, especially around the concept of the social. While British Gramscians like Raymond Williams and E.P. Thompson saw themselves as reconstructing a democratic common culture, Foucault, by contrast, says Peters, "openly displayed a 'mistrust of the social bond in his work', which indicated 'a clear refusal...to recognize in civil society...a principle of good opposable to the evil of the State'" (p. 76; citing Gordon 1996, p. 263). Yet, while this was the initial reception, as Peters notes, the French neo-Foucauldians whose work was translated in the 1970s, such as Jacques Donzelot, Robert Castel, and Pasquale Pasquino, "offered to a small group on the British left a new critical approach to "the social" that was both different and more powerful than neo-Marxist theories of ideology" (p. 77). This was a revised conception of the welfare state as a "series of governmental techniques and knowledges" (Peters, p. 19; citing Gordon 1996, p. 264).

Peters real concern is with the “neoliberal governance of welfare” and he starts by contrasting a Foucauldian approach to Stuart Hall’s neo-Gramscian approach to Thatcherism as ideology, and with Habermas and the Frankfurt School’s approach to “technocratic reason”. Summarising from Barry, Osborne and Rose’s (1996) ‘Introduction’ to *Foucault and Political Reason*, Peters notes that by recasting Thatcherism in ideological terms, Hall’s (1988, p. 11) approach represents neoliberalism simply as “a negative political response to welfareism” and thereby fails to be able to understand Thatcherism as an ‘art of government’ and the advances that it brought about. As Peters puts it, “not only does Hall’s approach smack of reductive and reactive logic, it also fails to comprehend the way in which a so-called retreat from the state can be constructed as a “re-governmentalization” through other means” (2001, p. 78). In response to Habermas’s argument that the Frankfurt School represents technocratic reason as emanating from outside civil society and directed at citizens for the purposes of control and administration, the neo-Foucauldians approach “recognizes ‘technocratic reason’ not as something purely negative...which is then applied in a coercive fashion to us”, but as a technology of the self as “a practice we engage in willingly in the process of producing ourselves as free subjects of a certain kind” (p. 78). For Peters the nature of the relation between neoliberalism and the governance of welfare emerges in the context of these two questions. Foucault in this sense encourages a more nuanced and complex response to neoliberalism than traditionally the left has been able to provide, recognising the centrality of governmentality and democracy to critiques of the existing order, both themes neglected in traditional leftist approaches.

Liberalism is represented as a critique of state reason and as a discourse which seeks to set limits on the state, while neoliberalism, for Foucault, exists in various variants – the Ordoliberalen in Germany, the Human Capital theorists in America, being the two he analyses in his lectures at the Collège de France in 1979 and 1980.⁶ The space of society emerges in the opposition to the totality of the state, allowing for what Gilles Deleuze called the “rise of the social” (Peters 2001, p. 84). Central to the neoliberal governance of welfare as a consequence of reducing the state’s trading activities “through privatization programs and the downsizing of the public sector” has been a concomitant erosion of the state’s ability “to mediate in the market to achieve the traditional welfare goal of full employment” (p. 84). As Peters continues:

The paradox is that precisely at the point when neoliberals are attempting conceptually to remoralize the link between welfare and employment, neoliberal governments have dismantled arrangements for state arbitration in the labor market, substituting an

individualized employment contract, and some neoliberal states show signs of moving away from the minimum wage. This must be mapped against the growth of a permanent underclass, of those structurally disadvantaged in terms of access to an increasingly specialized and highly segmented labor market.

(Peters 2001, p. 84)

At the same time there has been a move to new indirect forms of taxation, and to forms of consumer taxes. This is part of the process of the state writing itself out of the traditional responsibilities concerning welfare through various strategies: individualization, greater contractualization, and greater responsabilization of individuals and families. Such strategies have given rise to the notion of the ‘enterprising self’ whereby individuals manage themselves in what becomes a new “privatized consumer welfare economy. Individuals are called upon to apply certain management, economic, and actuarial techniques to themselves as subjects of a newly privatized welfare regime” (p. 85). The “enterprise form”, says Peters summarising Burchell (1996), “constitutes the distinguishing mark of a style of government” (p. 85), while:

education and training are key sectors in promoting national economic competitive advantage and future national prosperity. They are seen increasingly as the passport for welfare recipients to make the transition from dependent, passive welfare consumer to an “enterprise self”. (p. 85)

Such an individualization, says Peters, leads to greater investment in human skills, underwritten by neoliberal theories such as human capital theory and human resources management. The social becomes reduced to the level of private investment decisions, hence heralding a shift from a welfare state to a Schumpeterian workfare state (p. 86). This shift involves a shift at different levels of social structure—economic, political, institutional, cultural – heralding a process of cultural reconstruction. Such a transformation has led in Keat and Abercrombie’s (1991) terms, to an “enterprise culture” which has involved a process of remodelling institutions along commercial lines and encouraging the development of enterprising values and skills, in contrast to the “culture of dependency” characteristic of the welfare state.

This essential idea of an ‘enterprise culture’ emerged first in Britain during the 1980s (Morris 1991) and functions to represent classic liberal arguments in cultural terms. It contains a number of aspects: (1) it encourages the acquisition of enterprising qualities such as ‘self-help’, ‘self-reliance’, initiative’, ‘energy’, ‘independence’, boldness’, ‘a willingness to take risks’ etc.; (2) it elevates the model of the business enterprise as the preferred model of economic and social reconstruction; (3) it attempts to neutralize those qualities which are inimical to business values; and (4) it constitutes a proposal for additional limitations on the size and functions of the state and for increased responsabilization of individuals and families in relation to these limitations (Keat 1991; Peters 1992).

⁶ On this subject, see Burchell (1996), Lemke (2001), Foucault (1982, 1984, 1991).

Embodied within the notions of enterprise and choice are an individualist social ontology which places responsibility on the individual for their failure to achieve meaningful outcomes in both education and employment. Within the enterprise formulation there is the clear message that each individual is responsible for themselves: if you don't have a job, create one; and if you fail, it is as a result of your own inadequacies. What is deemphasized in the *interdependence* between individuals and the consequent necessity of collective action to achieve the goals of freedom and security for all. That individuals are inseparably linked to the social structure and that as a consequence there is a social and moral obligation of the society acting through the vehicle of the state to assist in arranging the social futures for each rising generation. The state which is nothing but the collective embodiment of individuals therefore has an obligation to enforce reasonable conditions of equality on the basis that, while a society should provide the conditions for enterprise, all individuals are correspondingly indebted to society for the conditions and structures provided, and on this basis, individuals should contribute in direct proportion to the luck or good fortune they experience. In this sense, just as publicly provided education is necessary in order to ensure the production and reproduction of the social capital upon which the market depends, so the regulatory functions of the democratic state are necessary in order to reconcile the freedom and opportunities of each with like freedom and opportunities for all.

This sort of Foucauldian approach also underpins *Education Policy: Globalisation, Citizenship, Democracy*, written by myself, with John Codd and Anne-Marie O'Neill (Olssen et al. 2004). In this book we develop a Foucauldian approach to reading policy as well as a Foucauldian political philosophy and a Foucauldian politics of education. Foucauldian approaches to education policy clearly provide a distinctive view of history and historical method which marks a radical departure and rejection from both Liberal and Marxist accounts of the emergence and functions of mass schooling in the western world. Against Marxist and traditional critical accounts, Foucault opposes all forms of materialist reductionism or explanation in terms of economic factors. Rather his own approach stresses the multiplicity of material causes, and the constitutive role of discourse. Against Liberals he displaces the ontological priority placed on the individual as the authors of their own selves and the moral individualism which such an approach entails.

Acknowledgements This chapter is based upon and constitutes a revision of Chapter 10 of my 2006 book, *Michel Foucault: Materialism and Education*. Boulder: Paradigm Publishers. The publishers are thanked for its use in this publication.

Note on Contributor

Mark Olssen is Professor of Political Theory and Education Policy in the Department of Political, International and Policy Studies, University of Surrey. His most recent books are *Liberalism, Neoliberalism, Social Democracy: thin communitarian perspectives on political philosophy and education* (2010), and *Toward A Global Thin Community: Nietzsche, Foucault, and the Cosmopolitan Commitment* (2009). He is co-author (with John Codd and Anne-Marie O'Neill) of *Education Policy: Globalisation, Citizenship, Democracy* (2004). He was a co-editor of *Govermentality Studies in Education* (2010), and of *Re-Reading Education Policies* (2010). He is published widely in book chapters and articles in academic journals in Britain, America and Australasia.

References

- Abrams P (1968) *The origins of British sociology 1834–1914*. University of Chicago Press, Chicago
- Ahl H (2008) Motivation theory as power in disguise. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 151–163
- Andersson P (2008) Recognition of prior learning as a technique of governing. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 126–137
- Anyon J (1991) The retreat of Marxism and socialist feminism: post-modern and poststructural theories in education. *Curriculum Inq* 24 (2):115–133
- Aronowitz S, Giroux H (1991) *Postmodern education: politics, culture, and social criticism*. University of Minnesota Press, Minneapolis
- Baker B (2001) *In perpetual motion: theories of power, educational history and the child*. Peter Lang, New York
- Baker BM, Heyning KE (eds) (2004a) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York
- Baker BM, Heyning KE (2004b) *Dangerous coagulations? research, education and a traveling Foucault*. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 1–79
- Ball SJ (ed) (1990a) *Foucault and education: discipline and knowledge*. Routledge, London
- Ball SJ (1990b) *Introducing monsieur Foucault*. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 1–10
- Ball SJ (1990c) *Management as Moral Technology: a Luddite analysis*. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 153–167
- Ball SJ (2012) *Foucault, power and education*. Routledge, London
- Barry A, Osborne T, Rose N (eds) (1996) *Foucault and political reason*. UCL Press, London
- Berglund G (2008) Pathologizing and medicalizing lifelong learning: a deconstruction. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 138–150
- Biesta G (1998) *Pedagogy without humanism: Foucault and the subject of education*. *Interchange* 29(1):1–16
- Biesta G (2008) *Encountering Foucault in lifelong learning*. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 193–206

- Bratich JZ, Packer J, McCarthy C (eds) (2003) *Foucault, cultural studies and governmentality*. SUNY Press, Albany
- Britzman D (1991) *Practice makes practice: a critical study of learning to teach*. SUNY Press, Albany
- Bröckling U (2006) On creativity: a brainstorming session. *Educ Philos Theory* 38(4):513–522
- Burchell G (1996) Liberal government and techniques of the self. In: Barry A, Osborne T, Rose N (eds) *Foucault and political reason*. UCL Press, London, pp 19–36
- Butler J (1993) *Bodies that matter: on the discursive limits of sex*. Routledge, London
- Butler J (2004) Bodies and power revisited. In: Taylor D, Vintges K (eds) *Feminism and the final Foucault*. University of Illinois Press, Urbana/Chicago, pp 183–197
- Burchell G, Gordon C, Miller P (eds) (1991) *The Foucault effect. Studies in governmentality*. Harvester Wheatsheaf, London
- Cherryholmes C (1988) *Power and criticism: post-structural investigations in education*. Teachers College Press, New York
- Chouliaraki L, Fairclough N (1999) *Discourse in late modernity*. Edinburgh University Press, Edinburgh
- Davies B (1989) *Frogs and snails and feminist tales: preschool children and gender*. Allen & Unwin, Sydney
- Dean M, Hindess B (eds) (1998) *Governing Australia: studies in contemporary rationalities of government*. Cambridge University Press, Cambridge
- Drummond J (2000) Foucault for students of education. *J Philos Educ* 34(4):709–719
- Durkheim E (1933) *The rules of sociological method*. The Free Press, New York
- Dussel I (2004) Fashioning the schooled self through uniforms: a Foucauldian approach to contemporary school policies. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 85–117
- Dworkin G (1988) *The theory and practice of autonomy*. Cambridge University Press, Cambridge
- Edwards R (2002) Mobilizing lifelong learning: governmentality in educational practices. *J Educ Policy* 17(3):353–365
- Edwards R (2003) Ordering subjects: actor networks and intellectual technologies in lifelong learning. *Stud Educ Adults* 35(1):55–67
- Edwards R (2008) Actively seeking subjects? In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 21–33
- Edwards R, Nicoll K (2004) Mobilizing workplaces: actors, discipline and governmentality. *Stud Contin Educ* 26(2):159–173
- Edwards R, Usher R (1994) Disciplining the subject: the power of competence. *Stud Educ Adults* 26(1):1–14
- Elias N (1978) *What is sociology?* Hutchinson, London
- Elias N (1982) *The court society*. Blackwell, Oxford
- Elias N (1987) *Involvement and detachment: contributions to the sociology of knowledge*. Blackwell, Oxford
- Ellsworth E (1989) Why doesn't this feel empowering? Worthing through the repressive myths of critical pedagogy. *Harvard Educ Rev* 59(3):297–324
- Erevelles N (2002) (Im)Material citizens: critical race theory, disability studies, and the politics of education. *Disabil Cult Educ* 1(1):5–26
- Ewald F (1986) *L'État-Providence*. Grasset, Paris
- Fejes A (2008) Historicizing the lifelong learner: governmentality and neoliberal rule. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 87–100
- Fendler L (1998) What is it impossible to think? A genealogy of the educated subject. In: Popkewitz TS, Brennan M (eds) *Foucault's challenge: discourse, knowledge and power in education*. Teachers College Press, New York, pp 39–63
- Fogde M (2008) Self-governance in the job search: regulative guidelines in job seeking. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 103–113
- Foucault M (1975) *Discipline and punish: the birth of the prison*. Random House, New York
- Foucault M ([1976] 1998) *The history of sexuality vol. 1: the will to knowledge*. Penguin, London
- Foucault M (1982) Michel Foucault: Vorlesungen zur Analyse der Machtmechanismen 1978 (partially complete transcription of a lecture given at the Collège de France in 1978), translation in German by A Pribersky. In: *Der Staub und die Wolke*. Impuls, Bremen, pp 1–44, cited in T Lemke (2001)
- Foucault M (1984) La Phobie d'Etat (partial transcription of lecture at Collège de France delivered on 31 Jan 1979) *Libération* 30 June/1 July, p 21, cited in T. Lemke (2001)
- Foucault M (1991) Governmentality. In: Burchell G, Gordon C, Miller P (eds) *The Foucault effect: studies in governmentality*. Harvester Wheatsheaf, London, pp 87–104
- Gale T (2001) Critical policy sociology: historiography, archaeology and genealogy as methods of policy analysis. *J Educ Policy* 16(5):379–393
- Goodson I, Dowbiggin I (1990) Docile bodies: commonalities in the history of psychiatry and schooling. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 105–133
- Gordon C (1996) Foucault in Britain. In: Barry A, Osborne T, Rose N (eds) *Foucault and political reason*. UCL Press, London, pp 253–270
- Gore J (1994) Enticing challenges: an introduction to Foucault and educational discourses. In: Martusewicz RA, Reynolds WM (eds) *Inside/Out: contemporary critical perspectives in education*. St. Martin's Press, New York, pp 109–120
- Gore J (1998) Disciplining bodies: on the continuity of power relations in pedagogy. In: Popkewitz TS, Brennan M (eds) *Foucault's challenge: discourse, knowledge and power in education*. Teachers College Press, New York, pp 231–254
- Gray-Rosendale L (1999) Investigating our discursive history: "JBW" and the construction of the "basic writer's" identity. *J Basic Writ* 18(2):108–135
- Hacking I (1995) *Rewriting the soul: multiple personality and the sciences of man*. Princeton University Press, Princeton
- Hall S (1988) *The hard road to renewal: Thatcherism and the crisis of the left*. Verso, London
- Hammerberg DD (2004) Technologies of the self in classrooms designed as "Learning Environments": (Im)possible ways of being in early literacy instruction. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 359–384
- Harwood V, Rasmussen ML (2004) Studying schools with an "Ethics of Discomfort". In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 305–325
- Henriques J, Hollway W, Urwin C, Venn C, Walkerdine V (1984) *Changing the subject: psychology, social regulation, and subjectivity*. Methuen, London
- Hoskin K (1979) The examination, disciplinary power and rational schooling. *Hist Educ* 8(2):135–146
- Hoskin R (1990) Foucault under examination: the crypto-educationalist unmasked. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 29–56
- Hoskin R, Macve R (1986) Accounting and the examination: a genealogy of disciplinary power. *Account Org Soc* 11(2):105–136
- Hultqvist K (2004) The travelling state, the nation, and the subject of education. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 153–187
- Hunter I (1994) *Rethinking the school: subjectivity, bureaucracy, criticism*. Allen and Unwin, St Leonards
- Hunter I (1996) *Assembling the school*. In: Barry A, Osborne T, Rose N (eds) *Foucault and political reason: liberalism, neo-liberalism and rationalities of government*. UCL Press, London, pp 143–166

- Ingleby D (1987) Psychoanalysis and ideology. In: Broughton JM (ed) *Critical theories of psychological development*. Plenum, New York, pp 177–210
- Jones D (1990a) The genealogy of the urban schoolteacher. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 57–76
- Jones D, Ball S (1995) Michel Foucault and the discourse of education. In: McLaren P, Giarelli J (eds) *Critical theory and educational research*. SUNY Press, Albany, pp 39–52
- Jones K, Williamson K (1979) The birth of the schoolroom. *IC* 5(1):5–6
- Jones R (1990b) Educational practices and scientific knowledge: a genealogical reinterpretation of the emergence of physiology in post-revolutionary France. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 78–105
- Kant I (1929) *The critique of pure reason* (trans: Kemp Smith N). Macmillan Press, London (A edition 1781 + B edition 1787).
- Keat R (1991) Introduction: starship Britain or universal enterprise? In: Keat R, Abercrombie N (eds) *Enterprise culture*. Routledge, London, pp 1–17
- Keat R, Abercrombie N (eds) (1991) *Enterprise culture*. Routledge, London
- Kirk D (1998) *Schooling bodies: school practice and public discourse, 1880–1950*. Leicester University Press, London
- Kirk D (2004) Beyond the “Academic” curriculum: the production and operation of biopower in the less-studied sites of schooling. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 117–135
- Knight J, Smith R, Sachs J (1990) Deconstructing hegemony: multicultural policy and a populist response. In: Ball SJ (ed) *Foucault and education: disciplines and knowledge*. Routledge, London, pp 133–153
- Larrosa J (ed) (1995) *Poder, escuela. Subjetivación*. La Piqueta, Madrid
- Lather P (1991) *Getting smart: feminist research and pedagogy with/in the postmodern*. Routledge, London
- Lather P (1996) Postcolonial feminism in an international frame: from mapping the researched to interrogating mapping. In: Paulston R (ed) *Social cartography: mapping ways of seeing education and social change*. Garland, New York, pp 357–373
- Lather P (2004) Foucauldian “Indiscipline” as a sort of application: qu(e)er(y)ing research/policy/practice. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 279–305
- Lemke T (2001) ‘The birth of bio-politics’: Michel Foucault’s lecture at the College de France on neo-liberal governmentality. *Econ Soc* 30(2):190–207
- Levinson M (1999) *The demands of liberal education*. Oxford University Press, Oxford
- Liesner A (2006) Education or service? remarks on teaching and learning in the entrepreneurial university. *Educ Philos Theory* 38(4):483–496
- MacKenzie D (1979) Eugenics and the rise of mathematical statistics in Britain. In: Irvine J, Miles I, Evans J (eds) *Demystifying social statistics*. Pluto Press, London, pp 39–50
- Macpherson CB (1962) *The political theory of possessive individualism*. Clarendon Press, Oxford
- Marshall J (1989) Foucault and education. *Aust J Educ* 33(2):97–111
- Marshall J (1990) Foucault and educational research. In: Ball SJ (ed) *Foucault and education: discipline and knowledge*. Routledge, London, pp 11–28
- Marshall J (1995) Skills, information and quality for the autonomous chooser. In: Olssen M, Morris Matthews K (eds) *Education, democracy and reform*. New Zealand Association for Research in Education/Research Unit for Maori Education, Auckland, pp 44–59
- Marshall J (1996a) Personal autonomy and liberal education: a Foucauldian critique. In: Peters M, Hope W, Marshall J, Webster S (eds) *Critical theory, post-structuralism and the social context*. The Dunmore Press, Palmerston North, pp 106–126
- Marshall J (1996b) Michel Foucault: personal autonomy and education. Kluwer Academic Publishers, Dordrecht
- Marshall J (2001) A critical theory of the self: Wittgenstein, Nietzsche, Foucault. *Stud Philoso Educ* 20(1):75–91
- Marshall J (ed) (2003) *Poststructuralism, philosophy, pedagogy*. Kluwer Academic Publishers, Dordrecht
- Marshall J (2004) Michel Foucault: Marxism, liberation and freedom. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 256–278
- Marx K (1971) *A contribution to the critique of political economy*. Lawrence and Wishart, London
- Masschelein J (2006) Experience and the limits of governmentality. *Educ Philos Theory* 38(4):561–576
- Masschelein J, Simons M (2002) An adequate education in a globalized world? A note on immunization against being-together. *J Philos Educ* 36(4):589–608
- Masschelein J, Simons M (2005) The strategy of the inclusive education apparatus: inclusive education for exclusive pupils. *Stud Philos Educ* 24(2):117–138
- Masschelein J, Simons M (eds) (2006) *Europa anno 2006. Educatieve berichten uit niemandsland [Europe anno 2006. Educational message out of no-man’s land]*. Acco, Leuven
- Masschelein J, Simons M (2007) The architecture of the learning environment: a school without a ‘soul’? *Oase* 72:6–13
- Masschelein J, Simons M, Brockling U, Pongratz L (2006) The learning society from the perspective of governmentality. *Educ Philos Theory* 38(4):415–417
- Masschelein J, Simons M, Bröckling U, Pongratz L (eds) (2007) *The learning society from the perspective of governmentality*. Blackwell, Oxford
- McLaren P (1991) Schooling and the postmodern body: critical pedagogy and the politics of enmeshment. In: Giroux H (ed) *Postmodernism, feminism and cultural politics: redrawing educational boundaries*. SUNY Press, Albany, pp 144–173
- McWilliam E (2004) What does it mean to feel like teaching? In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 135–152
- Middleton S (1998) *Disciplining sexuality: Foucault, life histories and education*. Teachers College Press, New York
- Miller J (1990) *Creating spaces and finding voices: collaborating for empowerment*. SUNY Press, Albany
- Morris P (1991) Freeing the spirit of enterprise: the genesis and development of the concept of enterprise culture. In: Keat R, Abercrombie N (eds) *Enterprise culture*. Routledge, London, pp 21–37
- Mourad R (2001) Education after Foucault: the question of civility. *Teach Coll Rec* 103(5):739–759
- Nicoll K (2008) Discipline and e-learning. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 164–177
- Olssen M (1993) Science and individualism in educational psychology: problems for practice and points of departure. *Educ Psychol* 13(2):155–172
- Olssen M (1999) *Michel Foucault: materialism and education*. Bergin and Garvey, Westport
- Olssen M (2003) Foucault’s conception of critique: Kant, humanism and the human sciences. In: Peters M, Olssen M, Lankshear C (eds) *Futures of critical theory: dreams of difference*. Rowman & Littlefield, New York, pp 73–102
- Olssen M (2004) Can a liberal theory of multicultural education be defended? *J Educ Policy* 19(4):529–540
- Olssen M (2005) Foucault, educational research and the issue of autonomy. *Educ Philos Theory* 37(3):365–389

- Olssen M (2006) Foucault and the imperatives of education: critique and self-creation in a non-foundational world. *Stud Philos Educ* 25 (3):191–217
- Olssen M (2008) Understanding the mechanisms of neoliberal control: lifelong learning, flexibility and knowledge capitalism. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 34–47
- Olssen M, Codd J, O'Neill A-M (2004) *Education policy: globalisation, citizenship, democracy*. Sage, London
- Olsson U, Petersson K (2008) The operation of knowledge and construction of the lifelong learning subject. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 61–73
- Pagano JA (1990) *Exiles and communities: teaching in the patriarchal wilderness*. SUNY Press, Albany
- Papastephanou M (2001) Reformulating reason for philosophy of education. *Educ Theory* 51(3):293–313
- Peters M (1992) Starship education: enterprise culture in New Zealand. Access: *Crit Perspect Educ Policy* 11(1):1–12
- Peters M (2000) Writing the self: Wittgenstein, confession and pedagogy. *J Philos Educ* 34(2):353–368
- Peters M (2001) Poststructuralism, Marxism, and neoliberalism: between theory and politics. Rowman & Littlefield, New York
- Peters M (2003) Why Foucault? New Directions in Anglo-American Educational Research, Invited keynote at the conference. After Foucault: perspectives on the analysis of discourse and power in education, The University of Dortmund, 29–31 Oct 2003
- Peters M (2005) The new prudentialism in education: actuarial rationality and the entrepreneurial self. *Educ Theory* 55(2):123–157
- Peters M, Marshall J (1996) Individualism and community: education and social policy in the postmodern condition. The Falmer Press, London
- Pongratz LA (2006) Voluntary self-control: education reform as a governmental strategy. *Educ Philos Theory* 38(4):471–482
- Popkewitz TS (2004) The reason of reason: cosmopolitanism and the governing of schooling. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 189–224
- Popkewitz TS (2008) The reason of reason: cosmopolitanism, social exclusion and lifelong learning. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 74–86
- Popkewitz TS, Brennan M (eds) (1998) *Foucault's challenge: discourse, knowledge and power in education*. Teachers College Press, New York
- Popkewitz TS, Franklin BM, Pereyra MA (eds) (2001) *Cultural history and education: critical essays on knowledge and schooling*. Routledge/Falmer, New York
- Popkewitz T, Olsson U, Petersson K (2006) The learning society, the unfinished cosmopolitan, and governing education, public health and crime prevention at the beginning of the twenty-first century. *Educ Philos Theory* 38(4):431–450
- Quaghebeur K (2006) Participation for free. Exploring (limits of) participatory government. *Educ Philos Theory* 38(4):497–512
- Reich R (2002) *Bridging liberalism and multiculturalism in American education*. Chicago University Press, Chicago
- Ricken N (2006) The power of power – questions to Michael Foucault. *Educ Philos Theory* 38(4):541–560
- Rose N (1985) *The psychological complex: social regulation and the psychology of the individual*. Routledge and Kegan Paul, London
- Rose N (1996) *Inventing ourselves: psychology, power and personhood*. Cambridge University Press, Cambridge
- Seals G (1998) Objectively yours, Michel Foucault. *Educ Theory* 48(1):50–66
- Simons M (2002) Governmentality, education and quality management: toward a critique of the permanent quality tribunal. *Zeitschrift für Erziehungswissenschaft* 5(4):617–633
- Simons M (2006) Learning as investment. Notes on governmentality and biopolitics. *Educ Philos Theory* 38(4):523–540
- Simons M (2007) 'To be informed': understanding the role of feedback information for Flemish/European policy. *J Educ Policy* 22 (5):531–548
- Simons M, Masschelein J (2006a) The learning society and governmentality: an introduction. *Educ Philos Theory* 38 (4):417–430
- Simons M, Masschelein J (2006b) The permanent quality tribunal in education and the limits of education policy. *Policy Futures* 4:294–307
- Simons M, Masschelein J (2007) Only love for the truth can save us: truth-telling at the (world)university. In: Peters M, Besley T (eds) *Why Foucault? New directions in educational research*. Peter Lang, New York, pp 139–161
- Simons M, Masschelein J (2008) Our 'will to learn' and the assemblage of a learning apparatus. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 48–60
- Simons M, Masschelein J, Quaghebeur K (2005) The ethos of critical research and the idea of a coming research community. *Educ Philos Theory* 37(6):817–832
- Sipos Zackrisson K, Assarsson L (2008) Adult learner identities under construction. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 114–125
- Solomon N (2008) Academic work and adult education: a site of multiple subjects. In: Fejes A, Nicoll K (eds) *Foucault and lifelong learning: governing the subject*. Routledge, London/New York, pp 178–190
- St. Pierre EA (2004) Care of the self: the subject and freedom. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 325–358
- Tamboukou M (2000) Of other spaces: women's colleges at the turn of the nineteenth century. *Gender, Place, Cult* 7(3):247–264
- Tikly L (2003) Governmentality and the study of education policy in South Africa. *J Educ Policy* 18(2):161–174
- Toll CA, Crumpler TP (2004) Everything is dangerous: pastoral power and university researchers conducting interviews. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 385–405
- Tuschling A, Engemann C (2006) From education to lifelong learning: the emerging regime of learning in the European union. *Educ Philos Theory* 38(4):451–470
- Varela J (1983) *Modos de educación en la España de la Contrarreforma*. La Piqueta, Madrid
- Varela J (2001) Genealogies of education: some models of analysis. In: Popkewitz TS, Franklin BM, Pereyra MA (eds) *Cultural history and education: critical essays on knowledge and schooling*. RoutledgeFalmer, New York, pp 107–124
- Varela J, Alvarez-Uria F (1991) *Arqueología de la escuela*. La Piqueta, Madrid
- Veyne P (1997) Foucault revolutionizes history. In: Davidson A (ed) *Foucault and his interlocutors*. University of Chicago Press, Chicago/London, pp 146–182
- Walkerdine V (1984) Developmental pedagogy and the child-centred pedagogy: the insertion of Piaget into early education. In: Henriques J, Hollway W, Urwin C, Venn C, Walkerdine V (eds) *Changing the subject: psychology, social regulation, and subjectivity*. Methuen, London, pp 153–202
- Weber M (1930) *The protestant ethic and the spirit of capitalism*. Allen & Unwin, London
- Weems L (2004) Troubling professionalism: narratives of family, race, and nation in educational reform. In: Baker BM, Heyning KE (eds) *Dangerous coagulations: the use of Foucault in the study of education*. Peter Lang, New York, pp 225–264

Using or Mobilizing Foucault? Choice Remarks on Eclecticism and Trends in Educational Research

29

Andreas Fejes

Abstract

This response to Olssen's chapter examines the use of Foucault's work in research on lifelong learning and post-compulsory education. In commenting on the uses of Foucault in articles published in four academic education research journals between 1999 and 2006, it identifies four main uses. These are, Foucault used: as an interpretative strategy, in eclectic ways, as a means to posing an argument, and as decoration. The findings also suggest that while Foucault's work may sometimes be mobilized in this area of educational research in superficial ways, other have wrestled with how Foucault's work might be used to revitalise critical discourse.

Keywords

Lifelong Learning • Foucault • Governmentality • Power/knowledge • Genealogy

Introduction

Mark Olssen's (2013) chapter tracing Foucault's influence in and on educational research points to an important shift in how educational scholars have tried to find new tools to help problematise education in innovative and different ways during the 1980s and 1990s. In this piece, I will elaborate further on his discussion by introducing an analysis of how Foucault's name and work are used in the study of lifelong learning.

In a review of articles referring to Foucault published in four academic journals, 1999–2006 (*Adult Education Quarterly*, *International Journal of Lifelong Education*, *Studies in Continuing Education* and *Studies in the Education of Adults*), of a total of 617 published articles, 56 make reference to Foucault. This is 9 % of all articles published in the journals. At a first glance, it might seem a lot. However, in undertaking a closer reading of the articles, the picture becomes more nuanced.

Based on a qualitative reading focused on how the authors mobilize Foucault in their studies, four kinds of uses of Foucault can be discerned: 'Foucault as an interpretative strategy' (13); an 'eclectic use of Foucault' (9); 'Foucault to pose an argument' (13), and 'Foucault as decoration' (21).

In the last of these categories, the authors only refer to Foucault in passing. Typically, this is as a way of noting that Foucault has had a major influence on how power is viewed, or that Foucault is a central scholar in the development and discussion of post-structuralism. Foucault's work is not really "used" in the analysis conducted in such studies, and more profound uses of his work are not very prominent (see also Fejes 2008a). One reason for such shallow invocations of Foucault could be that he is presented as one of the major 'icons', which one 'should' refer to (others might be Giddens, Habermas, Marx, etc.). Another might simply be that the author wants to trace the key sources for a concept, idea, framing, etc.

Similarly, in the category "Foucault to pose an argument", Foucault is invoked as a way to make an analytical point in a part of the article. One example is using the concept of panopticon to make an argument about how women learn empathy in prison (Kilgore 2001). Another is

A. Fejes (✉)
Department of Behavioural Sciences and Learning,
Linköping University, Linköping, Sweden
e-mail: andreas.fejes@liu.se

using the concept of power and knowledge to argue how motivational theories in adult education construct the unmotivated adults (Ahl 2006). But what of the other categories of use, which suggest a deeper level of engagement?

Eclectic Uses of Foucault

‘Eclectic use of Foucault’ refers to studies where a Foucauldian approach is asserted, claimed, and/or combined with other kinds of perspectives. A notable example is feminist writers who have drawn on Foucault’s work to offer a poststructural feminism that develops and advocates a particular route to analysing practices of resistance (Albertyn et al. 2001; Alexiou 2005; English 2005, 2006; Fenwick 2001, 2002; Hughes 2000). For instance, Fenwick (2001, 2002) wants to understand how the subjectivities of women who start their own business are shaped through dominating discourses, hence the initial mobilization of Foucault’s name and work. But Fenwick also wants to understand the ways in which these women adapt to the dominating subjectivities or whether they resist and adopt other subject positions. So poststructural feminism is advanced as a specific means to analysing how practices of resistance are created by/for the women. Based on such an analysis, Fenwick offers suggestions about how feminists and poststructuralists can contribute to the creation of counter discourses in educational practices.

Eclectic uses are also represented in studies that focus on issues of inclusion and exclusion in relation to practices of resistance. For example, Crowther et al. (1999) have the explicit ambition of bringing about changes in how adult literacy issues are positioned and addressed in Scotland. They advance this by arguing that change will take place if the dominating discourses and power-knowledge relations are made visible and thus available to critique. The authors draw on Foucault’s notion of power/knowledge to identify the dominant way of speaking, and how this affects who we should be. The authors do not offer a discourse analysis though. Instead, they present an argument invoking Foucault that identifies the dominating way of reasoning, and then propose a solution as to how one can/should reason differently as a way of building a new Scotland.

A tension that can be illustrated by such studies is that, in this case, the authors want all the voices of the citizens to be heard but the question remains, is that really/also to include those of the dominant discourse? What would Foucault have to say on this, or the way his work is being invoked? An eclectic rather than consistently worked through approach to Foucault’s body of work is at risk here. Drawing on his work patchily can allow some to mount an argument as to a means of making statements about how one should act and form a better society, it might even be employed in the attempt to

revitalise critical discourse. But still, and most importantly, there is no guarantee this is more than via a selective and partial deployment of his work (cf. Hodgson).

Foucault As an Interpretative Strategy

Among the 56 articles, 13 articles employed ‘Foucault as an interpretative strategy’. These articles outline a Foucault-inspired framework and attempt to use this consistently to analyse practices of lifelong learning. A few articles draw on Foucault’s (2003) later work where he problematizes political power in relation to government (e.g. Edwards 2003; Edwards and Nicoll 2004; Fejes 2005; Olssen 2006). Here, the concept of governmentality often guides these analyses, a concept which has become quite popular within this area of research during the last few years (cf. Fejes and Nicoll 2008). Some other articles draw on Foucault’s concept of genealogy to historicise the lifelong learner (Fejes 2005) or to trace one’s own educated body back in time to show how disciplinary power and pastoral power are part of the author’s own genealogy (Chapman 2003). While other articles outline a framework where Foucault’s concept of power, knowledge, and discipline are deployed to guide parts of or the entirety of the analysis. For example, in a study of HIV prevention workers (Egan 2003), a study where lifelong learning is seen as a disguise for the exercise of power (Wilson 1999), or in a study in which the authors ask about the spatial aspects of a strategy of lifelong and flexible learning (Edwards and Clarke 2002).

Drawing on Different Parts of Foucault’s Work

Related to the ways Foucault is being invoked and used in such studies, a question that could shed some light on his influence in and on educational research is to see which particular instances and parts of his work are drawn upon (cf. Hodgson 2013). Among the 56 articles, the most commonly quoted books are *Discipline and Punish* (Foucault 1991) quoted in 28 of 56 articles, and *Power/Knowledge* (Foucault 1980) quoted in 22 articles. Foucault’s earlier work on archaeology is almost totally absent, and his later work on governmentality, genealogy and ethics are only sparsely used. A non-Foucauldian question would be, why? One possible answer could be that it was through *Discipline and Punish* that Foucault’s idea of how power operates through institutions (such as in the factory and school) in relation to the body was made available to a wider audience, including educational researchers, also noted by Olssen. Drawing parallels between Foucault’s ideas of the panopticon, disciplining power, observation and division, and the school was an easy step, something that Foucault

also mentioned. Thus, ideas about disciplinary power have become a major influence in educational research about lifelong learning drawing on Foucault.

Conclusion

In this analysis, it is clear that Foucault's later work on governmentality and his work on genealogy seem to be fairly seldom used in these particular journals. One reason might be that research on adult education, to a large extent, focuses on the micro-practices of education and lifelong learning. Thus, governmentality has not (yet?) become a useful analytical concept. Another reason might be that academics using governmentality might pursue publishing their output elsewhere. This becomes clear when we consider Foucault-inspired educational research in general. Here there is a pattern where *Discipline and Punish* and *Power/knowledge* were the dominating texts, as used during most of the 90s. At the end of the 90s and into the new millennium, genealogy and governmentality analyses have become more common (Fejes 2006). Such a trend does not seem to be present in the review of lifelong learning made here. Instead, as has been argued, governmentality and genealogy are marginally applied in research in this area as represented in the four journals analyzed. However, lately, it seems as if governmentality has become a more common analytical tool in research on lifelong learning (cf. Fejes and Nicoll 2008; Fejes 2008b), and especially in education in general (cf. Masschelein et al. 2007; Peters and Besley 2007; Peters et al. 2009).

Must we but speculate whether this is what Foucault would have wanted; and whether this situation will, or even deserves to, persist? Or, indeed, if post-, anti-, or neo-Foucauldian studies of education are the next layers of analysis to consider?

Note on Contributor

Andreas Fejes is a Professor in Education at Linköping University in Sweden. He has published extensively on topics related to Foucault and lifelong learning. He has recently published (with co-editor K. Nicoll) *Foucault and Lifelong Learning: Governing the Subject* (2008). He has also published in journals such as: *Journal of Education Policy*, *Educational Philosophy and Theory*, *British Journal of Sociology of Education*, *International Journal of Lifelong Education*, and *Pedagogy, Culture & Society*. He is one of the founding editors of *European Journal for Research on the Education and Learning of Adults*.

References

- Ahl H (2006) Motivation in adult education: a problem solver or a euphemism for directions or control? *Int J Lifelong Educ* 25 (4):385–405
- Albertyn LM, Kapp CA, Groenwald CJ (2001) Patterns of empowerment in individuals through the course of a life-skills programme in South Africa. *Stud Educ Adults* 33(2):180–200
- Alexiou A (2005) A tale of the field: reading power and gender in the learning organization. *Stud Contin Educ* 27(1):17–31
- Chapman V-L (2003) On 'knowing one's self' selfwriting, power and ethical practice: reflections from an adult educator. *Stud Educ Adults* 35(1):35–53
- Crowther J, Tett L, Galloway V (1999) Adult literacy and democratic renewal in Scotland. *Stud Educ Adults* 31(2):210–219
- Edwards R (2003) Ordering subjects: actor networks and intellectual technologies in lifelong learning. *Stud Educ Adults* 35(1):54–67
- Edwards R, Clarke J (2002) Flexible learning, spatiality and identity. *Stud Contin Educ* 24(2):153–165
- Edwards R, Nicoll K (2004) Mobilizing workplaces: actors, discipline and governmentality. *Stud Contin Educ* 26(2):159–173
- Egan J (2003) Advocate, mentor or master? Work-client power dynamics in HIV prevention for injection drug users. *Stud Educ Adults* 35 (2):173–184
- English LM (2005) Foucault, feminists and funders: a study of power and policy in feminist organisations. *Stud Educ Adults* 37 (2):137–150
- English LM (2006) A Foucauldian reading of learning in feminist nonprofit organizations. *Adult Educ Q* 56(2):85–101
- Fejes A (2005) New wine in old skins: changing patterns in the governing of the adult learner in Sweden. *Int J Lifelong Educ* 24 (1):71–86
- Fejes A (2006) Constructing the adult learner: a governmentality analysis. LiU-Tryck, Linköping
- Fejes A (2008a) What's the use of Foucault in research of lifelong learning and post-compulsory education: a review of four academic journals. *Stud Educ Adults* 40(1):7–23
- Fejes A (2008b) To be one's own confessor: educational guidance and governmentality. *Brit J Sociol Educ* 29(6):653–664
- Fejes A, Nicoll K (eds) (2008) *Foucault and lifelong learning: governing the subject*. Routledge, London
- Fenwick T (2001) Knowledge and the enterprising self: workplace refugees navigating entrepreneurial discourses. *Stud Educ Adults* 33(2):127–134
- Fenwick T (2002) Lady, Inc: women learning, negotiating subjectivity in entrepreneurial discourses. *Int J Lifelong Educ* 21(2):162–177
- Foucault M (1980) *Power/knowledge: selected interviews and other writings 1972–1977*. Pantheon, New York
- Foucault M (1991) *Discipline and punish: the birth of the prison*. Penguin, Harmondsworth
- Foucault M (2003) Governmentality. In: Rabinow P, Rose N (eds) *The essential Foucault: selections from the essential works of Foucault 195–1984*. The New Press, New York, pp 229–245
- Hodgson N (2013) On understanding power and the subject of educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 233–235
- Hughes C (2000) Resistant adult learners: a contradiction in feminist terms? *Stud Educ Adults* 32(1):51–62
- Kilgore DW (2001) A group learning intervention into how women learn empathy in prison. *Adult Educ Q* 51(2):146–164

- Masschelein J, Simons M, Bröckling U, Pongratz L (eds) (2007) *The learning society from the perspective of governmentality*. Blackwell, Oxford
- Olssen M (2006) Understanding the mechanism of neoliberal control: lifelong learning, flexibility and knowledge capitalism. *Int J Lifelong Educ* 25(3):213–230
- Olssen M (2013) Framing and analysing educational research: a recent history of transactions from a Foucauldian perspective. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 215–228
- Peters M, Besley T (eds) (2007) *Why Foucault? New directions in educational research*. Peter Lang, New York
- Peters M, Besley T, Olssen M, Maurer S, Weber S (eds) (2009) *Governmentality studies in education*. Sense Publishers, Rotterdam
- Wilson A (1999) Creating identities of dependency: adult education as a knowledge-power regime. *Int J Lifelong Educ* 18(2):85–93

Naomi Hodgson

Abstract

I take up Mark Olssen's assertion that the radicalness of Foucault's thought is not grasped in educational research and question whether Foucault's adoption in to the field has effected the shift away from previous paradigms, and in particular Marxist theory, as claimed. The use of Foucault is often restricted to analyses concerned with power, and his own understanding is often misread, and thus the state-individual binary remains in place. Furthermore, it can be said that the failure to grasp the implications of Foucault's displacing of the state and the subject means that educational research fails to account for the conditions in which education, and the subject of education, are constituted today. A brief outline of Foucault's understanding of critique then indicates the more radical questioning his thought invites.

Keywords

Critique • Power • Subjectivity • Limit experience • Radical

Introduction

Mark Olssen (2013) provides a comprehensive overview of the breadth of areas of educational scholarship to which Foucault's work has been applied. I wish to address some issues with the way in which Foucault's work is taken up in educational research, referring back to Olssen's assertion that the 'radicalness' of Foucault's work is often not grasped.

Olssen's account shows how Foucault's work has been used to shift thinking about education from previous dominant influences of, for example, Marx or Freud or R.S. Peters. I argue, however, that a Marxist or neo-Marxist understanding of power still underlies many accounts employing Foucault's ideas, which remain focussed on the structures of power and do not attend to the problematisation of the subject that Foucault's work enables.

As identified in previous work, the way in which Foucault's work is used in educational research can be illustrated in relation to three interrelated aspects: its use in relation to work concerned with identity politics, the misunderstanding of Foucault's account of power, and the application of Foucault's work as theory (see Hodgson and Standish 2009; Fejes 2013). Ian Hunter, focussing particularly on the study of the school, touches on a further aspect of the way in which Foucault's work is taken up. He argues that the predominance of liberal and of Marxist theory in education leads to educational theorists being highly principled but to the extent of failing to attend to the actuality of the form and function of the school (Hunter 1996, pp. 145–146). The basis of such principled theory – 'a conception of the person as a self-developing subject, who "learns" through freedom, and for whom the school is thus only an instrument of the person's self-realization or *Bildung*' (pp. 145–146) – is for Hunter the reason that Foucault's thought has failed to gain any critical purchase in the field of education. Instead, where his work has been taken up, it has been absorbed into 'the progressive emancipatory project', of which he was critical (p. 144). This draws attention not

N. Hodgson (✉)
Humanities and Social Sciences, Institute of Education,
University of London, London, UK
e-mail: n.hodgson@ioe.ac.uk

only to the theoretical presuppositions present in the take-up of Foucault's thought but also to the way in which this limits the understanding of the constitution of education itself.

In what follows, the first section will indicate how the understanding of power in Foucault's account is often misread and, therefore, able to be assimilated to an emancipatory politics. While in the second, I will indicate Foucault's understanding of critique and how this relates to a questioning of the subject.

Power and Subjectivation

Foucault's account of power/knowledge presented in *Discipline and Punish* (1977) is perhaps his most explicit reference to the modern school. As such, and perhaps reflecting prior concerns of critical educational theorists, his understanding of power has been the main focus of his use in the study of education. However, Foucault's studies of discourses and practices within the fixed physical institutions of the prison and the clinic, for example, have led to the deterministic application of the concept of power/knowledge to educational institutions.

Power/knowledge is not a theory to be applied but forms part of a more complex body of work concerned with how the human being is made subject to and by these norms and practices. Further, as Foucault stated, power was not the central concern of his work, but the subject. The word subject, he points out, has two meanings: 'subject to someone else by control and dependence, and tied to his own identity by a conscience or self-knowledge. Both meanings suggest a form of power which subjugates and makes subject to' (Foucault, in Dreyfus and Rabinow 1982, p. 212).

As Dan Butin has put it, there is a 'tried and false trope of Foucault as a jazzier and hipper version of critical theory. . . Foucault becomes the theory *du jour* [the latest trend] for demonising rankings, norms, standardizations et al.' (Butin 2006, p. 374). Many, in particular neo-Marxist, analyses are shaped by an underlying idea of the state and the operation of power, which are not displaced (as they should be) by Foucault's analysis. Rather, 'the state' and 'power' remain understood as fixed pre-given entities, in relation to which the subject is understood to be produced through processes of domination. As Foucault puts it:

The excessive value attributed to the problem of the state is expressed, basically, in two ways: the one form, immediate, affective and tragic, is the lyricism of the cold monster we see confronting us. But there is a second way of overvaluing the problem of the state, one that is paradoxical because it is apparently reductionist: it is the form of analysis that consists in reducing the state to a certain number of functions, such as the development of productive forces and the reproduction of relations of production, and yet this reductionist vision of the relative importance of the state's role nevertheless invariably renders it absolutely essential as a target needing to be attacked and a privileged position needing to be occupied. But the state, no more probably today than at any other time in its history, does

not have this unity, this individuality, this rigorous functionality, nor, to speak frankly, this importance.

(Foucault, in Dreyfus and Rabinow 1982, p. 220)

By understanding the state as a fixed entity, solid, separate, and overarching, one is prevented from seeing – or at least fully considering the implications of – the way in which the 'art of government' operates through the individual and through the language in which it is constructed. Further, this does not displace the understanding of the human subject as a fixed stable entity.

Foucault's claim to show 'how' human beings are made subjects perhaps appeals to a need to find the answer, to provide a conclusive solution to educational problems. It is this definitive sense of 'how' that seems to be assumed in taking Foucault to be offering a means of emancipation and a fixed theory. As Foucault has suggested:

For some people, asking questions about the 'how' of power would limit them to describing its effects without ever relating those effects either to causes or to a basic nature. It would make this power a mysterious substance which they might hesitate to interrogate in itself, no doubt because they would prefer not to call it into question. By proceeding this way, which is never explicitly justified, they seem to suspect the presence of a kind of fatalism. But does not their very distrust indicate a presupposition that power is something which exists with three distinct qualities: its origin, its basic nature, and its manifestations?

(Foucault, in Dreyfus and Rabinow 1982, p. 217)

Instead Foucault argues: 'to begin the analysis with a "how" is to suggest that power as such does not exist' (ibid.), that is, power 'assumed to exist universally in a concentrated or diffused form, does not exist' (p. 219). The question is "'How", not as in "How does it manifest itself?" but "By what means is it exercised?" and "What happens when individuals exert (as they say) power over others?"' (p. 217). A relation to others is therefore presupposed.

Foucault's understanding of power, then, rejects the idea of power as an entity, in contrast to the way it appears in much educational research concerned with an emancipatory politics, where power is understood as something one might get: one either has power or is powerless. For Foucault, freedom is a pre-requisite for power. There is not a binary: freedom or power, but a 'complicated interplay' (p. 221).

Foucault writes:

Maybe the target nowadays is not to discover what we are, but to refuse what we are. We have to imagine and to build up what we could be to get rid of this kind of political 'double bind', which is the simultaneous individualization and totalization of modern power structures. . . We have to promote new forms of subjectivity through the refusal of this kind of individuality which has been imposed on us for several centuries. (p. 216)

The exploration of what resistance, desubjectivation, might look like requires attention to the problematisation of the subject in Foucault's thought. This entails attention to the constitution of the relation of the self to the self in the current context. In educational research this requires asking who the subject of education is today.

The Possibility of Critique

In this final section I will indicate the understanding of critique in Foucault's work that enables this questioning. The use of Foucault's work in support of an emancipatory politics does not attend to the way in which critique itself is understood in Foucault's work. It is not to take a 'principled' position, an ideal standard, against which education is judged. Rather, his work can be seen in the context of the ascetic tradition. It is first a form of work on the self that puts one's thinking to the test of the conditions in which we find ourselves. Such work constitutes both a critique of the self and of society.

His understanding of the practice of philosophy as a form of work on the self entails a 'limit attitude': seeking the limits of a mode of governmentality (Foucault, in Rabinow 2000).¹

The identification of the limit-attitude shifts the understanding of critique from the weighing up of binaries according to a particular rationality or seeking an outside or originary freedom to which we might escape, to an ethos requiring a relationship of the self to the self in which change requires the individual bringing about a change in him or herself (p. 305): 'Criticism is no longer going to be practiced in the search for formal structures with universal value but, rather, as a historical investigation into the events that have led us to constitute ourselves and to recognize ourselves as subjects of what we are doing, thinking, saying' (p. 315).

On this understanding of critique, educational research cannot be seen as operating at a meta-level to such conditions, and therefore to the education system, but as in part constitutive of it.

Note on Contributor

Naomi Hodgson is a visiting research associate at the Institute of Education. Her research draws on philosophy, anthropology, and sociology. She is interested in the understanding

of the relationship between citizenship and learning in current European and UK policy, and the way in which learning and research form part of current modes of government. She is also interested in the way in which education as a field of research is understood and how new researchers are inducted into the field. Her current research focuses on the changing role of the university and the figure of the researcher.

References

- Butin D (2006) Review article: 'putting Foucault to work in educational research'. *J Philos Educ* 40(3):371–380
- Dreyfus H, Rabinow P (eds) (1982) *Michel Foucault: beyond structuralism and hermeneutics*. Harvester, Brighton
- Fejes A (2013) Using or mobilizing Foucault? Choice remarks on eclecticism and trends in educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 229–232
- Foucault M (1977) *Discipline and punish: the birth of the prison* (trans: Sheridan A). Penguin, London
- Foucault M (1982) Afterword: the subject and power. In: Dreyfus H, Rabinow P (eds) *Michel Foucault: beyond structuralism and hermeneutics*. Harvester, Brighton, pp 208–226
- Foucault M (2000) What is enlightenment? In: Rabinow P (ed) *Essential works of Michel Foucault, vol 1, Ethics*. Penguin, London, pp 303–319
- Hodgson N, Standish P (2009) The uses and misuses of poststructuralism in educational research. *Int J Res Method Educ* 32(3):309–326
- Hunter I (1996) Assembling the school. In: Barry A, Osborne T, Rose N (eds) *Foucault and political reason: liberalism, neo-liberalism, and rationalities of government*. University of Chicago Press, Chicago, pp 143–166
- Olssen M (2013) Framing and analysing educational research: a recent history of transactions from a Foucauldian perspective. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 215–228
- Simons M, Masschelein J (2009) "The art of not being governed like that and at that cost": comments on self-study in studies of governmentality. In: Peters M et al (eds) *Governmentality studies in education*. Sense, Rotterdam

¹ For a recent treatment of this idea in relation to the study of education see Simons and Masschelein (2009).

Part III

Contextualising Research in Education

Michael A. Peters

Abstract

This introduction to the third Part of the *Companion* uses the philosophies and challenges of contextualism to promote critical understandings of the contexts and contextualizations of education research. Theoretical and pragmatic attempts to ground and universalize inquiry falter in the face of contextualist critiques that surface the contingencies of thought and the textualization of inquiry. Chapters and commentaries in this Part illustrate how accounts of education research, across rationales, research designs and findings, are shaped by local contexts and power relations, alongside the historical and spatialized dimensions of ‘common sense’ through to claims to producing original knowledge. Examples from contributors and commentators discuss the interface of education research with critical race theory, youth studies, the creativity imperative, the knowledge economy, culture and comparative research, and the aspirations and limitations of problem-based methodologies. In short, readers are invited to consider the subtexts, pretexts and contexts of educational research, and how these relate to the ways in which inquiry is conceptualized, characterized, legitimated and represented before a wider, watching world.

Keywords

Contextualism • Situated knowledge • Subjugated knowledge • Power • Universalism

Introduction: Context and the Critique of Historical Reason

In *Provincializing Europe*, the Bengali historian, Dipesh Chakrabatty (2000), begins his account by observing that, “Historians have long acknowledged that the so-called “European age” in modern history began to yield place to other regional and global configurations toward the middle of the twentieth century” (p. 3). He continues noting the widely recognized point that “European history is no longer seen as embodying anything like “universal human history”” (ibid.), going on to suggest that ‘political modernity’ is impossible to think anywhere without the rule of modern institutions. Characterized as these are by the organs of the

state, bureaucracy and capitalist enterprise, Chakrabatty argues such institutions have come to rely on as much as they invoke a deeper set of concepts such as “citizenship, the state, civil society, public sphere, human rights, equality before the law, the individual, distinctions between public and private, the idea of the subject, democracy, popular sovereignty, social justice, scientific rationality” (p. 4). Each bears the imprint of European thought and history, and in so doing, convey “an unavoidable...universal and secular vision of the human” (ibid.), even through the Enlightenment humanism they articulated was contradicted in the practice and experience of European colonization.

At issue is whether that vision has become global, and remains so, despite its contestation. Of course, there are no guarantees that this European humanist legacy, basically the infrastructure of liberal modernity, will carry through intact into the late twenty-first century, particularly with the increasing global dominance of the economies of China,

M.A. Peters (✉)
Faculty of Education, University of Waikato, Hamilton, New Zealand
e-mail: m.peters@waikato.ac.nz

India and Brazil. But what matters to Chakrabatty (2000) and this Part of the *Companion* is the status and dynamics of the European intellectual tradition globally. For example, Chakrabatty claims it is “the only one alive in the social science departments of . . . modern universities” (p. 5), even as he goes on to soften this by acknowledging that such a tradition has been justifiably criticized by the likes of Martin Bernal and Samir Amin as in some sense, a fabrication of a pure, unbroken and even exclusively European tradition. Imperfect though it may be and open to criticism on various counts, it is *the* tradition that social scientists today find themselves inserted within. Importantly for Chakrabatty and hence this introduction to the next Part of the *Companion*, is the observation that the machinery – the concepts, methods and theories of modern social science – are indissolubly linked to the terms and frameworks of liberal political modernity. In effect, it is as though we ‘scientists’ and ‘scholars’ of the social could not think or proceed otherwise, even if the framework itself remains inadequate for coming to terms with concepts and categories that continue to bear the metaphysical traces of a confident European universalism, that purports to speak for the world.

Elsewhere, Chakrabatty (2003, unpaginated) drives the point home:

The normative pictures of a modern society that I carry inside my head are, typically and necessarily, European or Western in origin. I think through an intellectual tradition in which one is able to spell out, at least in principle, the broad constitution of a just social order on an *a priori* basis (Marx on the Gotha program and Rawls on justice would be examples of this). I use this blueprint to critique existing inequities. Yet I recognize that there are political imaginations shaping popular politics all over the world today that escape or exceed our normative understanding of the political. These imaginations belong neither to the Left nor to the Right. But they have global implications for governance all over the world.

In this context, he mentions critiques of historicism both poststructuralist (Foucault) and postcolonial in orientation, tracing out a certain kind of Hegelian historicism to claim that it was instrumental in forming a world history based on developmentalism, picturing Europe (and then America) on the basis of an ideology of progress as the yardstick of ‘late capitalism.’ Of course, the critique of historicism was for Foucault simultaneously the critique of historical reason. And so it is in a broader sense that this critique involves first an historicizing move – an historicizing of Kant’s universal categories, and an emphasis on a kind of radical contingency, that alerts us to the idea that things could have happened differently.

Foucault’s critique was also in tune with the poststructuralist tendency to reject the Enlightenment project of modernity and the universalizing grand narratives springing from a German historiography that projected a Eurocentric vision and teleology on emerging world history. This equally

broad critique consequently brought into question notions of an ‘objective history’ as an expression of the universal *a priori* category of the subject, hereby deemed the source of meaning, authenticity, moral authority, and political action. The questioning is, in this instance, with regard to any metanarrative: *who speaks for whom? Who is silenced?* While by the same philosophical brush, the interpretive nature of the social and human sciences, and the way their categories and concepts themselves emerged from a contingent history and disciplinary formation, raises the question of the narrative, social and discursive construction of knowledge.

Foucault (1984, p. 249) writes:

I think that the central issue of philosophy and critical thought since the eighteenth century has always been, still is, and will, I hope, remain the question: *What is this Reason that we use? What are its historical effects? What are its limits, and what are its dangers?*

The decisive move that Foucault makes as early as ‘The Orders of Discourse’, his inaugural lecture at the *Collège de France*, is to define discourse as a language practice that is understood relative to a discursive formation:

Whenever one can describe, between a number of statements, such a system of dispersion, whenever, between objects, types of statement, concepts, or thematic choices, one can define a regularity (an order, correlations, positions and functioning, transformations), we will say, for the sake of convenience, that we are dealing with a *discursive formation*. (Foucault 1972, p. 38)

For Foucault and his followers, the notion of ‘discourse’ and ‘épistème’ contextualizes our attempts at philosophy and historicizes that which purports to be universal. The move has the strategic consequence of emphasizing, “the textuality of history, and the historicity of texts,” to use the American critic Louis Montrose’s (1989, p. 20) terms to characterize the ‘New Historicism’. Stressing that every work is a product of the historic moment that created it, the (then) New Criticism is

a practice that has developed out of contemporary theory, particularly the structuralist realization that all human systems are symbolic and subject to the rules of language, and the deconstructive realization that there is no way of positioning oneself as an observer outside the closed circle of textuality. (Richter 2007, p. 1321)

The ‘new historicism’ stressed the literary character of history as a text. It explores the ambivalent relationship between text and context, to surface the way imagination, above the level of the mere chronicle of events, enters into the crafting of historical narratives. In important ways it is this renewed attention to contextualism that encourages us to doubt linear causal stories and to highlight interpretation, substituting a Foucauldian Nietzschean-inspired genealogical contextualism for a structuralist textualism that not only

recognizes the extratextual power relations that shape a text, but also the power relations that are the key to historical understanding and the basis of power/knowledge. Texts of all shapes and sizes are thus seen as products of particular periods and specific discursive formations. And hence we cannot not but make this interest also Part of this *Companion*, focusing in on text and its relation to context.

Contextualism and the Philosophy of Context

How could human behavior be described? Surely only by sketching the actions of a variety of human, as they are all mixed up together. What determines our judgment, our concepts and reactions, is not what *one* man is doing *now*, an individual action, but the whole hurly-burly of human actions, the background against which we see any action.

--Wittgenstein (1970) *Zettel*, §567

The background is the bustle of life. And our concept points to something within *this* bustle.

--Wittgenstein (1980) *Remarks on the Philosophy of Psychology*, v.2, §625.

Wittgenstein, the Austrian counter-Enlightenment philosopher, developed two distinctive philosophies and influenced the turn towards language ('the linguistic turn'). He was also, and perhaps remains, the preeminent philosopher of context. The work known as the *Philosophical Investigations* (Wittgenstein 1953) published posthumously, asserted a doctrine of 'meaning as use'. It helped to supply a pragmatic account of meaning that simultaneously took on both cultural and historic aspects leading to a radical semantic, cultural and epistemological contextualism.

Wittgenstein's contextualism embodied in the notion of language game and meaning-as-use emphasizes three features of language use: its contextuality (or situatedness), its performativity, and its normativity. As José Medina (2004) explains:

First, our speech acts are embedded in the situated activities that compose our 'form of life'; their significance can only be understood in the context of a life-praxis ('words have meaning only in the stream of life'; RPP4 II §687). Secondly, language and action are interwoven in such a way that we cannot separate questions about language and questions about agency: a philosophical account of language requires a philosophical elucidation of linguistic performance, of the things we do and don't do with, through, and around language, and of the places that our linguistic performances occupy in our lives. Thirdly, language use is always subject to normative expectations: the players' performance is governed by (typically tacit) norms or rules (no matter how vague, flexible, and fluctuating they may be); there are proper and improper ways of playing, correct and incorrect moves within the game (p. 563).

Michael Williams (1991, 2001), in emphasizing a substantive rather than semantic theory, detects contextualism as present in the views of Dewey, Popper, Austin, and

Wittgenstein. However Williams (2007) is keen to distinguish Wittgensteinian contextualism from charges of epistemic relativism, arguing that contextualism is not committed to the view that a belief's status depends on the believer's epistemic system, nor to the view that no system is superior to another.¹

For Wittgenstein, this is because sentences only have meaning as they appear contextually as parts of a *form of life*. He remarks: "Our knowledge forms an enormous system. And only within this system has a particular bit the value we give it" (Wittgenstein 1969, §410; §432). While some beliefs stand in a special position in that they escape doubt and act as *foundations* (§§ 89, 415, 449, 512 – "axis", "hinges", and even "axioms" (§§ 152, 341, 551), they serve only as entry points for truth in the belief system (§ 83) and constitute "the inherited background against which I distinguish between true and false" (§ 94).

Contextualism then is an epistemological doctrine that holds that, in an important non-trivial sense, meaning, truth, knowing, and justification are to be understood relative to a context. This context-dependence also has application in regard to ethics. In this regard, it is sometimes seen to lead to a "situationist ethics," that some scholars argue faces the threat of relativism. Contextualism has become increasingly popular in philosophical accounts of epistemology, and it has also been embraced in literary theory and forms of language analysis such as discourse theory. Indeed, it is possible to distinguish a metaphysical view of holism that holds that all entities are connected from an epistemological view; that an entity cannot be known without understanding the full context of its connections to other entities.

Similarly, the ethical view of contextualism holds that ethical value is not absolute but dependent on a specific personal, historical, or societal context, while the equivalent view in aesthetics holds that a work of art can be interpreted only in the light of its historical context, not absolutely. Thus it is of little surprise that linguistically, contextualism holds that the meaning of an utterance is shaped in far-reaching and uncodifiable ways by the context in which it is uttered. This form of pragmatism in language use is shared by thinkers as diverse as Wittgenstein, Bakhtin and Voloshinov.

¹ See Medina (2004) and Voltolini (2010). See also Stickney's (2009) "Contextualist Approach to Judging 'Sound' Teaching." Peter Unger's (1984) *Philosophical Relativity*, perhaps the most complete exposition of the contextualist view, argues (Abstract, unpaginated), "Philosophical relativity is a consequence of semantic relativity, the view that there obtains no objective answer to the question of what semantic content our terms bear, being applied to central terms within particular philosophical problems." It is a view that "turns on demonstrating that, with regards to several competing positions, neither is any better off than its rivals in so far as its being a reflection of deterministic, absolute, objective fact is concerned" (ibid.).

In fact, Voloshinov (1986, p.80), in *Marxism and the Philosophy of Language*, makes the following remark:

Contexts of usage for one and the same word often contrast with one another. The classical instance of such contrasting contexts of usage for one and the same word is found in dialogue. In the alternating lines of a dialogue, the same word may figure in two mutually clashing contexts. Of course, dialogue is only the most graphic and obvious instance of varidirectional contexts. Actually, any real utterance, in one way or another or to one degree or another, makes a statement of agreement with or a negation of something. Contexts do not stand side by side in a row, as if unaware of one another.

For Bakhtin, arguing against the then prevailing linguistic formalism in Europe, an utterance cannot be understood only with reference to its structure. Rather, it must be seen in the context of other utterances to which it responds. This context Bakhtin calls ‘dialogue’, arguing that every utterance is made in reference to a certain audience and becomes understandable only against the background of a shared context. The dialogic nature of language finds its ultimate expression in the intertextuality of language and literature (Peters 2011).

For education research, all these forms of contextualism may be relevant to understanding epistemic and normative claims and to analyzing discourse, especially where forms of testimony are at issue (Adler 2006). Attention to contextualism in education research can be seen to fuel an opening up of the deep and often unexamined or taken for granted assumptions about the way gender, class or social position influence what we accept as knowledge or legitimate knowers. It is important then that educational researchers begin to understand more carefully the nature of knowledge claims when investigating educational problems empirically by attending to the variety of theory concerning context-dependence in epistemology and ethics.

This is because contextualism in its various forms has provided a challenge to standard epistemological theories such as the correspondence and coherence theory of truth. Epistemic contextualism arises as a doctrine about the meaning of the word ‘know’ (contextualist semantics) and implies a pluralism of epistemic standards based on the relationship between meaning and use in the multiplicity of ‘language games’, as expressed in the work of Ludwig Wittgenstein (1953). In addition, some philosophers have emphasized how the roots of knowledge and claims to know are deeply social and based on social relations, implying that the relationship between meaning and use is ultimately pragmatic and situation-dependent.

This position has encouraged the development of ‘social epistemology’ which sees a central role of society in the knowledge-forming process based on the early sociology of knowledge thesis argued for by Karl Mannheim (1936) that extended Marx’s theory of ideology and gave rise to the *Ideologiekritik* employed in Critical Theory. Social

epistemology holds that the institutional structures that guide or frame scientific communication influence the nature of our social-epistemic practices (Goldman 1978, 1999, 2006). Thomas Kuhn (1970) and Philip Kitcher (1993) have investigated the notion of consensus and ‘consensus practice’ within epistemic communities. Others, following Wittgenstein, hold “there are no context-free or super-cultural norms of rationality” (Bloor et al. 1996, p. 27).

Situated and Subjugated Knowledges

What might this mean for the theorizing and practice of education research? Feminist social epistemology and standpoint epistemology have sought to investigate the role of gender in knowledge production – “not only *how* our social relations of gender have shaped our knowledge practices, but also whether and how these relations *should* play a role in good knowing” (Grasswick 2006, §1), developing out of issues first raised by Harding and Hintikka’s (1983) *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology and Philosophy of Science*. Nancy Hartsock (1983) developed a feminist standpoint theory arguing the Marxist thesis “that social position is inversely related to epistemic position” (Grasswick 2006, §8). Feminist standpoint theorists then often see objectivity as a social process, arguing for the necessary role of background gendered assumptions in theory choice, to draw out the connection between democracy, ethics and knowledge.

Donna Haraway (1991) takes this further, in “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective” (Chapter 9), where she writes:

‘our’ problem is how to have simultaneously an account of radical historical contingency for all knowledge claims and knowing subjects, a critical practice for recognizing our own ‘semiotic technologies’ for making meanings, and a non-nonsense commitment to faithful accounts of a ‘real’ world, one that can be partially shared and friendly to earth-wide projects of finite freedom, adequate material abundance, modest meaning in suffering, and limited happiness. (p. 187)

And she goes on to frame the notion of “situated knowledges” in the following terms:

I am arguing for politics and epistemologies of location, positioning, and situating, where partiality and not universality is the condition of being heard to make rational knowledge claims. These are claims on people’s lives; the view from a body, always a complex, contradictory, structuring and structured body, versus the view from above, from nowhere, from simplicity. Only the god-trick is forbidden. Here is a criterion for deciding the science question in militarism, that dream science/technology of perfect language, perfect communication, final order. (p. 195)

In the same breath we might also invoke Foucault's (1980a) notion of power-knowledge and the associated concept of 'subjugated knowledges'. Power/knowledge (*pouvoir-savoir*) is a fundamental theme of Foucault's genealogy of the human sciences yet Foucault is clear not to identify the equivalence of power and knowledge or reason and power. His task rather is to pose the question of their relationship. Foucault extols the virtues of *local criticism* against totalitarian theory production as 'autonomous, non-centralised kind of theoretical production, one that is to say whose validity is not dependent on the approval of the established regimes of thought' such as Marxism and psychoanalysis (p. 81). Arising out of the problematic of local criticism Foucault argues is 'an *insurrection of subjugated knowledge*' (p. 81). He defines the notion in this way

By subjugated knowledges I mean two things: on the one hand, I am referring to the historical contents that have been buried and disguised in a functionalist coherence or formal systemisation. Concretely, it is not a semiology of the life of the asylum, it is not even a sociology of delinquency, that has made it possible to produce an effective criticism of the asylum and likewise of the prison, but rather the immediate emergence of historical contents. And this is simply because only the historical contents allow us to rediscover the ruptural effects of conflict and struggle that the order imposed by functionalist or systematising thought is designed to mask. Subjugated knowledges are thus those blocs of historical knowledge which were present but disguised within the body of functionalist and systematising theory and which criticism – which obviously draws upon scholarship – has been able to reveal. (p. 81)

Subjugated knowledges, like situated knowledges, arise out of the local context as a form of criticism and also represent knowledges that have been disqualified or silenced by a system of institutional filters and official funding patterns. Foucault elaborates this idea by referring to the way power operates to sanction and enhance the truth status of the professional and expert as the expense of the patient or the inmate, or the institutionalized:

On the other hand, I believe that by subjugated knowledges one should understand something else, something which in a sense is altogether different, namely, a whole set of knowledges that have been disqualified as inadequate to their task or insufficiently elaborated: naive knowledges, located low down on the hierarchy, beneath the required level of cognition or scientificity. I also believe that it is through the re-emergence of these low-ranking knowledges, these unqualified, even directly disqualified knowledges (such as that of the psychiatric patient, of the ill person, of the nurse, of the doctor – parallel and marginal as they are to the knowledge of medicine – that of the delinquent etc.), and which involve what I would call a popular knowledge (*le savoir des gens*) though it is far from being a general commonsense knowledge, but is on the contrary a particular, local, regional knowledge, a differential knowledge incapable of unanimity and which owes its force only to the harshness with which it is opposed by everything surrounding it – that it is through the re-appearance of this knowledge, of these local popular knowledges, these disqualified knowledges, that criticism performs its work. (pp. 81–82)

Genealogy for Foucault, a term he borrows from Nietzsche, is the name for the union of erudite knowledge and local memory that establishes a strategic knowledge of historical struggles for tactical political action today. It stands opposed to the centralizing effects of associated with the institutionalization of scientific discourses. These local or 'minor knowledges' (as Deleuze calls them), 'in opposition to the scientific hierarchisation of knowledges and the effects intrinsic to their power' (p. 85) recover and reconstitute local memory to release subjected knowledges and bring them into play. Educational research that employs Foucault's 'archeology' or 'genealogy' tends to undermine the taken for granted assumptions about official discourses questioning their power and rediscovering local criticism and discursivities (Peters and Besley 2007; 2008; Peters et al. 2009). This method, with its emphasis on the local context and on power relations, is particularly appropriate for educational researchers who are working with or alongside minorities and the oppressed in a participatory struggle for social justice. Foucault's (1980b) comments on the exercise of power are both useful and instructive:

power must be understood in the first instance as the multiplicity of force relations immanent in the sphere in which they operate and which constitute their own organization; as the process which, through ceaseless struggles and confrontations, transforms, strengthens, or reverses them; as the support which these force relations find in one another, thus forming a chain or a system, or on the contrary, the disjunctions and contradictions which isolate them from one another; and lastly, as the strategies in which they take effect, whose general design or institutional crystallization is embodied in the state apparatus, in the formulation of the law, in the various social hegemonies. (pp. 92–93)

This understanding of power is one of the major achievements of Foucault and one well worth restating here. As he says in, *The History of Sexuality* (Foucault 1980b) the analysis of power is itself not universal but demands an understanding of the local context to identify its relations in existing relationships, in its capillary forms and flows, and in its multiple forms of resistance:

- Power is not something that is acquired, seized, or shared, something that one holds on to or allows to slip away; power is exercised from innumerable points, in the interplay of non-egalitarian and mobile relations.
- Relations of power are not in a position of exteriority with respect to other types of relationships (economic processes, knowledge relationships, sexual relations), but are immanent in the latter; they are the immediate effects of the divisions, inequalities, and disequilibria which occur in the latter. . . ; they have a directly productive role, wherever they come into play.
- Power comes from below; that is, there is no binary and all-encompassing opposition between rulers and ruled at the root of power relations, and serving as a general matrix -no such duality extending from the top down

and reacting on more and more limited groups to the very depths of the social body....

- Power relations are both intentional and nonsubjective. If in fact they are intelligible, this is not because they are the effect of another instance that “explains” them, but rather because they are imbued, through and through, with calculation: there is no power that is exercised without a series of aims and objectives....
- Where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power.... These points of resistance are present everywhere in the power network. Hence there is no single locus of great Refusal, no soul of revolt, source of all rebellions, or pure law of the revolutionary. Instead there is a plurality of resistances, each of them a special case: resistances that are possible, necessary, improbable; others that are spontaneous, savage, solitary, concerted, rampant, or violent; still others that are quick to compromise, interested, or sacrificial; by definition, they can only exist in the strategic field of power relations. (pp. 94–96, abridged)

Subtexts, Pretexts, Contexts: Contributions to This Part

Zeus Leonardo opens the contributions with a chapter entitled “Dialectics of Race Criticality: Studies in Racial Stratification and Education”. Leonardo delineates the criteria for a critical study of race in education in ways that testify to the complexity of the subject matter whilst also interrogating multiple positions on the issues. The chapter unfolds with a deft critique of various analytical frameworks available, and provides an insightful mediation on wider questions of how research intentions, questions and categories of thought contextually emerge, may become obsolete, and perhaps even disappear from research communities over time and within intellectual spaces. Responses by Gloria Ladson-Billings and Michael W. Apple follow, both of whom continue the questioning of what it has meant, now means, and might mean to be ‘critical’ in relation to ‘race critical’ these days. In their own ways, Ladson-Billings and Apple probe what comes to count as analytically powerful, promoting close attention to historicized contexts and claims-making, including the contradictions and challenges education researchers face in justifying and scoping their studies of education phenomena and constructs in complex and contested terrains. Together, the opening contributions illustrate how one’s preparations and disposition towards scholarship invite examinations of research reflexivity and recursivity, most notably in relation to power relations and claims to a contextual, critical praxis.

Susan Robertson provides the next chapter, “Untangling Theories and Hegemonic Projects in Researching Education and the Knowledge Economy”. Her contribution outlines a conceptual toolkit for reading and critiquing educational policies, projects and implementation in relation to the ‘knowledge economy’. Robertson illustrates how adopting a critical perspective and accounting for its explanatory power requires deliberations about rootedness: that is, where connection to context is not simply an assertion of critical credentials but is vouchsafed through, for example, illuminations of the dimensions of contestation in the ‘context of reception’. For Robertson, the recognition of the particular theatre for the use and interpretation of education research demands that analyses mustn’t be uncritically advanced as a neat solution to problems of education policy. Rather, as with the previous contributions, critical questions must be asked about the degrees and contingencies of contextualization, most notably in regard to the originating research imaginaries, but also in the realms of receptivity, and hence the recurring need for critical reflection on the construction, positioning and relations of research objects and subjects. Jane Kenway’s response further identifies some of the problematics here, given the iterative shaping of agents of education and the structurings and instantiations of agency. She argues that the complexities associated with explanations of the constitutive forces of the political economy of education often require a clarification and shifting of analytical frameworks. In her work, she finds the notion of ‘global assemblage’ compelling, and invites others to consider its value too, in their contexts. Throughout Kenway’s work, knowledge becomes increasingly understood as an ‘object of inquiry’, albeit mobilized in various ways, depending on discourse and setting. Thus the contextualist sensitivities and concerns at play here suggest attention be paid to the codifications, commodifications and hegemonics of particular knowledge systems, no matter whether they are claimed to be educative, scientific, global, innovative, or something quite otherwise.

In a similar vein, the next chapter, by Cushla Kapitzke and Stephen Hay, examines the implications of the “creativity imperative” for education research agendas and practices. Kapitzke and Hay show why accounts of historical process and detail are essential for understanding the substance and setting of any priority assigned to education, which in the context of the US report, ‘Tough Choices or Tough Times’, can be understood as a reframing of the creativity and capacities of the modern student, citizen and worker, indexed as these are to an ongoing ‘economisation’ of social life and thus, attempts to ‘better’ harness the sources of enterprise and innovation for ‘the sake of the economy’. Their chapter, with considered responses by Phil Graham, Karen L. Martin, and Justin O’Connor, shows how alternative subjectivities associated with imaginative capacity and

activity are marginalized by increasingly singular readings of creativity in education, such that socially inclusive, sustainable and productive ways of being are occluded, if not decimated. Graham rejects this ‘de- and re-contextualization’ as another symptom of the standardization of education, outlining some of the stark contradictions embedded in the ‘push to creativity’. Martin continues the critique, troubling the attempts to position the creativity imperative as a master discourse, arguing it perpetuates an imperialism and colonialism of peoples, particularly Aboriginals, that only serves to re-inscribe their erasure, exclusion and silencing. As O’Connor then notes, re-inventing previous master discourses rather than transforming education is not the only risk of pursuing the ‘creativity imperative’ in education. Context of production and performance of policy cannot be ignored. O’Connor quickly advances these points by illustrating how accounts of the uses and abuses of creativity in governance and industry are not automatically intelligible or transferable to the education sphere. The warning is stark: re-contextualisation is tempting, but particularities and nuance must not be overwritten in the rush to practice, or critique.

Questions of subtext and pretext also come to the fore in Marcia McKenzie’s contribution. McKenzie discusses the possibilities and complications of accounting for youth experiences and identities in education research, in a chapter entitled “Beyond the giving and taking of accounts: Time, space and the social in research with youth.” Her contribution illustrates the brute fact that context always exceeds that which is accounted (for) in research, and thus the very impossibility of claiming a full account of the other or oneself in research. Pursuing the question of, “To what cost?” in studies that focus on narrative, material conditions, or dynamic subjectivities, McKenzie illuminates the spectrum of embeddedness to disembodiedness of educational scholarship, as researchers (in some sense) seek to inhabit the ‘lives of others’ through their researcher-ly representations of education via various entrees into the spaces and times of youth. As Julie McLeod and David Stovall note in their responses, this is never simply a question of ‘better’ representing student voice or identities in research, but critically examining through research the contexts of self-making, as understood, ascribed and experienced by the researched as well as researcher. Thus attending to contextualist priorities might well impel an ‘undoing’ of taken-for-granted research practices and priorities, including an uncritical sense of compulsion to do yet more youth inquiry in education research.

The next chapter, by Mark Mason, also examines conceptual and methodological issues, but this time surrounding the concept of “culture” in international and comparative education research, within and across cultures, if not contexts. Providing a genealogy of culture, a deconstruction of

‘national culture’, and an examination of the conditions and implications of globalization, Mason seeks conceptual clarity and methodological rigour in how research is conceptualized and characterized as international and comparative in education research. Mark Bray’s response pushes this further, noting how comparison is fundamental to all forms of education research, because of the vary terms of the notion of a unit of analysis. How researchers use this to interact with and transcend cultural and contextual matters, and to what end, because a key question of Bray’s response piece. In the next chapter, Viviane Robinson repositions this analytical conundrum in terms of a theory-practice gap. For Robinson, any claims to a unit of analysis – to illuminate theory or practice, better theory and practice – must attend to whether it has purchase on either. When it does, then we can expect researchers to closely attend to context for their research claims to be meaningful in informing the theories of action that constitute practice. Thus for Robinson, as researchers and practitioners uncover and reconstitute theories of action, theories can be evaluated and revised through intra and cross-contextual criteria and activities. Advancing the integrity of the research demands attention to the conditions for appraising, disconfirming and adjudicating theory (e.g. a theory’s power and adequacies), which in a problem-based methodology, returns us to a key context for education research: that of collaborative inquiry. Responses from Brian Haig and Stuart McNaughton raise once again the prospect and problems of explanatory coherence in education research, which in turn encourage further attention to context and contextualization, as researchers seek to move beyond the immediate to the generalizable and transferable in their claims to know. Thus throughout this Part, we revisit key questions for the *Companion* in a variety of ways: asking, in which contexts does education research count, and why? How might education research be contextualized, decontextualized and recontextualized? And, what are the texts, pretexts and subtexts of education research?

Note on Contributor

Michael A. Peters is Professor of Education at the University of Waikato, New Zealand, and Emeritus Professor in Educational Policy, Organization, and Leadership at the University of Illinois at Urbana–Champaign. He is the executive editor of *Educational Philosophy and Theory*, and editor of two international e-journals, *Policy Futures in Education* and *E-Learning*. Michael’s research interests are in educational philosophy, theory and policy studies with a focus on the significance of both contemporary philosophers (Nietzsche, Wittgenstein, Heidegger) and the movements of poststructuralism, critical theory and analytic philosophy to the framing of educational theory and practice. He is also interested in philosophical and political economy questions

of knowledge production and consumption. His major current projects include work on distributed knowledge, learning and publishing systems, and ‘open education’.

References

- Adler J (2006) Epistemological problems of testimony. In: Zalta EN (ed) *The Stanford encyclopedia of philosophy*. Available at: <http://plato.stanford.edu/archives/win2006/entries/testimony-episprob/>. Stanford University, Stanford, CA
- Bloor D, Barnes B, Henry J (1996) *Scientific knowledge: a sociological analysis*. University of Chicago Press, Chicago
- Chakrabatty D (2000) *Provincializing Europe: postcolonial thought and historical difference*. Princeton University Press, Princeton
- Chakrabatty D (2003) Where is the now? The future of criticism. *Crit Inquiry* 30(2). <http://criticalinquiry.uchicago.edu/issues/v30/30n2.Chakrabarty.html>
- Foucault M (1972) *The archaeology of knowledge* (trans: Sheridan Smith AM). Pantheon, New York (Original work published 1969)
- Foucault M (1980a) Two Lectures. In: Gordon C (ed) *Power/knowledge: selected interviews and other writings 1972–1977*. Pantheon, pp 78–108
- Foucault M (1980b) *The history of sexuality, vol 1: an introduction* (trans: Hurley R). Vintage, New York
- Foucault M (1984) Space, knowledge, and power. In: Rabinow P (ed) *The Foucault reader*. Pantheon, New York, pp 239–256
- Goldman A (1978) Epistemics: the regulative theory of cognition. *J Philos* 75(10):509–523
- Goldman A (1999) *Knowledge in a social world*. Oxford University Press, Oxford
- Goldman A (2006) Social epistemology. In: *The Stanford encyclopedia of philosophy*. <http://plato.stanford.edu/archives/spr2007/entries/epistemology-social/>. Stanford University, Stanford, CA
- Grasswick H (2006) Feminist social epistemology. In: Zalta EN (ed) *The Stanford encyclopedia of philosophy*. URL: <http://plato.stanford.edu/archives/spr2012/entries/feminist-social-epistemology/>. Stanford University, Stanford, CA
- Haraway D (1991) *Simians, cyborgs and women: the reinvention of nature*. Routledge, New York
- Harding S, Hintikka M (eds) (1983) *Discovering reality: feminist perspectives on epistemology, metaphysics, methodology, and the philosophy of science*. Reidel, Dordrecht
- Hartsoc N (1983) The feminist standpoint: developing the ground for a specifically feminist historical materialism. In: Harding S, Hintikka M (eds) *Discovering reality: feminist perspectives on epistemology, metaphysics, methodology, and the philosophy of science*. Reidel, Dordrecht, pp 283–310
- Kitcher P (1993) *The advancement of science*. Oxford University Press, New York
- Kuhn T (1970) *The structure of scientific revolutions*, 2nd edn. University of Chicago Press, Chicago
- Mannheim K (1936) *Ideology and utopia*. Routledge, London
- Medina J (2004) The meanings of silence: Wittgensteinian contextualism and polyphony. *Inquiry* 47(6):562–579
- Montrose LA (1989) *Professing the renaissance: the poetics and politics of culture*. In: Aram Veeseer H (ed) *The new historicism*. Routledge, New York/London, pp 15–36
- Peters MA (2011) The Bakhtin circle, philosophy of language, and educational theory. In: White EJ, Peters MA (eds) *Bakhtinian pedagogy: opportunities and challenges for research, policy and practice in education across the globe*. Peter Lang, New York, pp 247–260
- Peters MA, Besley T (AC) (2008) *Subjectivity and truth: Foucault, education and the culture of the self*. Peter Lang, New York
- Peters MA, Besley T (AC) (eds) (2007) *Why Foucault? New directions in educational research*. Peter Lang, New York
- Peters MA, Besley T, Olssen M, Maurer S, Weber S (eds) (2009) *Governmentality studies in education*. Sense Publishers, Rotterdam
- Richter DH (2007) *The critical tradition: classical texts and contemporary trends*. Bedford/St. Martin’s, Boston
- Stickney JA (2009) Wittgenstein’s contextualist approach to judging ‘Sound’ teaching: escaping enthrallment in criteria-based assessments. *Educ Theory* 59(2):197–215
- Unger P (1984) *Philosophical relativity*. Oxford University Press, Oxford
- Voloshinov VN (1986) *Marxism and the philosophy of language*. Harvard University Press, Cambridge, MA
- Voltolini A (2010) Is Wittgenstein a contextualist? In: *Essays in philosophy*, 11(2) Article 3. Available at: <http://commons.pacificu.edu/eip/vol11/iss2/3>
- Williams M (1991) *Unnatural doubts: epistemological realism and the basis of skepticism*. Blackwell, Cambridge, MA
- Williams M (2001) *Problems of knowledge*. Oxford University Press, Oxford
- Williams M (2007) Why (Wittgensteinian) contextualism is not relativism. *Episteme* 4(1):93–114
- Wittgenstein L (1953) *Philosophical investigations*. Blackwell, Oxford
- Wittgenstein L (1969) On certainty (trans: Paul D, Anscombe GEM). Blackwell, Oxford
- Wittgenstein L (1970) *Zettel* (trans: Anscombe GEM). University of California Press, Berkeley
- Wittgenstein L (1980) *Remarks on the philosophy of psychology, vols 1 and 2* (trans: Anscombe GEM, eds: Anscombe GEM, von Wright GH). Blackwell, Oxford

Zeus Leonardo

Abstract

This chapter delineates the criteria for a critical study of race in education. In particular, it poses the central problem of whiteness in education within a general critical study of race. In doing this, the chapter does not engage race paradigmatically. It is an affirmation of criticality that does not locate it in any particular school of thought and subject to its assumptions but instead recruits multiple positions on the matter of race. It is guided by the spirit and claim that race in education is a complex issue that requires a critical framework that testifies to this very complexity. It is an attempt to build a project around race criticality that is less possessive and more dialogic. First, it introduces the main frameworks for a critical study of race, mainly Critical Race Theory, Critical Theory of Race, and Race Critical Theory. Second, it frames race work as the dialectic between explaining racial oppression and projecting racial utopia. Third, it presents a synthesis between particularities in racial experience and the universal features of racial oppression. Finally, it ends by arguing that race scholars immerse ourselves in critically understanding the racial formation as a prerequisite to any attempt to abolish it. As such, the ultimate sign of race criticality is imagining the disappearance of one's craft, the eventual obsolescence of one's racial interventions.

Keywords

Critical race theory • Critical social theory • Race stratification • Race inequality • Diversity

Introduction

This chapter starts by sketching three schools of thought on race as preparation for an attempt to delineate the criteria for critical studies of race in education. In particular, I will pose the central problem of Whiteness in education within a general critical study of race. In doing this, the following ruminations do not engage race paradigmatically. Rather, I employ an affirmation of criticality that does not locate it in any particular school of thought and subject to its assumptions, but instead recruits multiple

positions on the matter of race. I am guided by the spirit and claim that race in education is a complex issue that requires a critical research framework that testifies to this very complexity. If this sounds a bit eclectic and trendy, this is not my intent. Rather, I would like to build projects of inquiry around race criticality that are less possessive and more dialogic.

Opening Sketches

In social theory, the critical tradition has enjoyed a long history. Typically traced to Kant's eighteenth century philosophical critiques of reason, the sublime, and beauty, it has even been suggested that Kant's interventions were so significant that Western philosophy first became critical with

Z. Leonardo (✉)
Graduate School of Education, University of California,
Berkeley, CA, USA
e-mail: zeusleonardo@berkeley.edu

Kant (2000). Western epistemologies and philosophies arose from the particularities of European cultures and understandings. They are insightful, at times critical, but always partial like other ways of thinking.

Western thinking is partial for two reasons. First, it is partial in the sense that Western thought represents a slice of understanding, not its whole. Second, it is partial because it articulates a preferred way of comprehending the world, that is, a politics and thus its partiality is implicated in its politics. When Western ways of thinking are constructed as the universal standards for rational thought and derogate worldviews of color in the process, we see the racialized dimensions of European thought. It becomes *articulated* with race and we witness its cultural particularity transform into a racial project. From Hegel to Kant to Marx, the procession of a White racialized worldview develops into a formidable phenomenon (Bernasconi and Lott 2000; see also Churchill 1995).

In education, the signifier “critical” is so central that no self-respecting educator or scholar would call himself “uncritical.” It would be, as Eagleton (1991) has suggested elsewhere, akin to calling oneself “Fatso.” An uncritical educator would quickly be labeled ideological, which is worse than being branded an idiot (Parker 2005). No legitimate educator answers to the hail, “Hey stupid!” To be uncritical is not to be an educator at all, at least not in any accredited sense for all but the most reactionary would not dare question the label of “critical.”

There is also something about the critical project that is inherently Leftist. It seems to speak for the oppressed, those at the receiving end of disparities from wealth to health. For example, in the United States it is considered an irony to call a Republican politico “critical” although in these fickle times being a Democrat does not make one a lifetime card-carrying member of the critical club. That said, Dinesh D’Souza is not considered critical but his critic Vijay Prashad is; while Allan Bloom may be grouped with the first and Alex Callinicos with the second. Of course, criticality is always relative to a spectrum of political commitments and scholars may find the line of separation shifting, where one’s utopianism is, for another, nothing more than an ideology.

For the progressive Left, being critical has become the norm. In a word: hegemonic. This is a good trend, if not a tradition, but as I will show criticality needs also to be delineated in specific terms lest it be stripped of its edgy and meaningful deployment, particularly for the study of race. Otherwise, the well-intended use of “critical” in education becomes meaningless . . . uncritical. If, in studying race matters, all treatises wave the flag of critical, then critical loses its differential status as something set off from commonsensical thinking. Critical thinking, critical education, and critical change are some forms of criticality that get taken up to suggest that schooling ought to distinguish between the epiphenomenal and essence of learning.

As critical descends into common sense, it is in danger of becoming nonsense. Educators would do well to guard against this development.

In research on race and education, criticality enjoys some currency. With Ladson-Billings and Tate’s breakthrough (1995) essay, “Towards a Critical Race Theory of Education,” we might say that race theory in education becomes critical for the first time. I will not summarize the major tenets of a critical race theory (CRT) in education, largely a U.S.-based innovation, because there are many extant publications that accomplish this task (Gillborn 2008; Yosso 2006; Dixson and Rousseau 2005; Parker and Stovall 2005; Ladson-Billings 2004; Taylor 1998; Tate 1997). For my purposes, it suffices to say that race and racism are endemic to U.S. society.¹ This does not suggest that racism is pandemic or out of control and cannot be ameliorated. CRT in education is precisely that intervention that aims to halt racism by highlighting its pedagogical dimensions and affirming an equally pedagogical solution rooted in anti-racism. That said, CRT in education is a paradigmatic study of race to the extent that the problem of the color line is made to speak within a particular discourse, community, and postulates. For instance, the appropriation of Bell’s (1992) well-known, defiant injunction regarding the “permanence of racism” is understood within the particular context and constraints (in the Foucauldian sense) of a CRT understanding of education. CRT focuses its attention on conceptual and practical strategies to end racism and less on ending race as an organizing principle.² There are, as is usually the case, other competing paradigms for the study of race.

In addition to CRT, a Critical Theory of Race (CTR) makes legitimate claims to a “critical” study of race, usually tracing its tradition to the Frankfurt School program of emancipatory critique (Outlaw 1990). Often, but not always, informed by a Marxist critical interpretation of the Enlightenment, CTR is not typically U.S.-based and

¹Critical Race Theory is a specifically U.S. innovation (Peters 1995). As an intervention within legal studies, CRT responds with a particularly U.S.-based analysis of law, racial stratification, and methodology. Although CRT has been imported to explain other national contexts, by and large it has maintained a U.S.-centered analysis (see for example, Gillborn’s (2008) book-length use of the CRT framework to explain Great Britain’s racial contestation in education).

²This position is not necessarily in opposition to Bell’s assertion of the “permanence of racism,” which is an empirical or descriptive statement and not a prescriptive one. In other words, Bell is not suggesting that racism *should* be permanent. Rather, based on historical evidence there is more reason to suggest that it will not whither away, thus achieving a permanent status in U.S. society. Alternatively, Bell may be spurring readers to disrupt racism by recognizing this apparently simple truth and absurd state of racial affair. Here, he resembles Roediger’s (1991) ironic appropriation of a problematic refrain from colorblind discourse: “Reverse racism!” Bell is not merely adopting a cynical position on racism, but a radical realism. Where Bell may be criticized is in his apparent lack of a utopian discourse that imagines an alternative state of affair, whether or not it may be realized.

finds its inspiration in European philosophy. Some Marxist critical theorists of racism offer fundamental challenges to race thought, arguing that “race” is unavoidably caught in a reification of what is at heart an ideological concept (Cole and Maisuria 2007; Scatamburlo-D’Annibale and McLaren 2004; Darder and Torres 2004; Miles 2000; San Juan, Jr. 1992; Fields 1990). In short, a critical study of race is not a study of race at all, but an analysis of class antagonism within capitalism, which gives rise to the reality of racial division that is not caused by racial structures *per se*. A Marxist-inspired version of CTR is not a racial analysis of race but a class analysis of racialization. In Fields’ (1990) case, the concept of race is antiquated, which had its usefulness in explaining eighteenth century U.S. society and has since outlived its utility for understanding the current formation. Darder and Torres (2004) consider critical race theory a veritable oxymoron, arguing that no theory oriented to the study of an ideological concept passes the litmus test of “critical.” In fact, a Marxist theory of race does not dodge the problems of reification if it focuses on an ideological concept like race, which leads Miles (2000) to argue that:

In so far as Marxism asserts that all social relationships are socially constructed and reproduced in specific historical circumstances, and that those relationships are therefore in principle alterable by human agency, then it should not have space for an ideological notion that implies, and often explicitly asserts, the opposite. The task is therefore not to create a Marxist theory of “race”, but to deconstruct “race,” and to detach it from the concept of racism. (p. 140)

In education, this means that race has to be bracketed as a dependent concept and does not explain a primary relation, a status which belongs to class analysis. In writing and conversation, race is set off in quotation marks (what some call scare quotes) to designate its ideological status. Racism, on the other hand, merits critical study because, as Miles notes, it is rooted in political economy as an “ideological relation of production” (p. 141).

Yet still, Essed and Goldberg’s (2002) Race Critical Theory framework suggests that race is a discursive formation, which places them within the assumptions of a cultural studies or post-foundational critique of race. This school of thought promotes being critical of race and being race-critical of theory while still employing race categories, unlike a Marxist theorist of race who does not lend much credence to them. Dissatisfied with a critical theory that does not tackle race and race theory that is not critical, Essed and Goldberg describe their project as “[C]ritical theory necessarily requires a focus, among others, on race: and racial theory cannot help but be, in a normative sense, critical. Race, critique, and theory, we want to insist, are constitutive of the possibilities of thinking each other in any satisfactory way” (p. 4). Goldberg (1990 1993) maintains a continuity

with “race men and women” who center race analysis (that is, a racial analysis of race rather than a class analysis of race), while decentering and destabilizing essentialist renditions of it as biologicistic, pigment-oriented, or deterministic. RCT treats race as culture – or better, a cultural formation – not in the sense of ethnic theories, but part of the overall turn to studies of subject formation in social theory (see Cho 2008).

Gilroy’s (2000) new position “against race” follows along the same lines to suggest that race, as a mode of analysis and organization, has reached its limits as a viable alternative in a world that disturbs racial lines of association through diasporic and crosscultural-cutting relations that require new modes of understanding. No amount of resignifying race can escape its problems in a world that approaches the limits of race understanding, a condition of “post-race” (see also, Nayak 2006). Gilroy (2000) warns that race “cannot be readily signified or de-signified, and to imagine that its dangerous meanings can be easily re-articulated into benign, democratic forms would be to exaggerate the power of critical and oppositional interests. . . [D]estroying raciology and transcending ‘race’ are more than warranted” (p. 12). Sharing commitments with Ignatiev, Garvey, and Roediger, who support the abolition of Whiteness, Gilroy seeks the abolition of race. Inherently a problematic relation, race may be supplanted by the conviviality of planetary humanism and Gilroy reminds us that dismantling race is not something to be feared but posed as a possibility.

In education, this means that race analysis proceeds with “no guarantees.” This suggests the necessity to analyze race in order to undo the relation itself, just as “we must be conscious of black and white in order to transcend black and white” (Wu 2002, p. 27). The “post” in post-race signals the possibility of a social formation without race but this would be its most obvious reading. A more nuanced reading suggests that the post-movement opens new possibilities for critique, new questions to be posed about race in a way that was not possible heretofore. If race is to continue in the U.S., it will be a nonessentialist relation or the risks become predictable (Omi and Winant 1994). If race is to be dissolved, there is good reason for ending a relation that has, from day one, transformed education into enlightenment for Whites and a burden for people of color. Post-race analysis suggests that an opportunity presents itself to critical social theory.

Racial Oppression, Reality and Liberation

To begin, race criticality is the search for a discourse that attests to race reality as lived. This is easier said than done because within a racial oppression reality passes as less or worse than itself. As a result, human understanding fails to pin down reality as it is (Leonardo 2003). This is

the accomplishment of racism, its ability to distort our understanding of reality, or at least subvert our ultimate security in our search for it. By claiming this point, I affirm the risk taking that is inherent in a critical study of race, which at every juncture is dogged by the threat of reification. Rather than surrender the cause, race criticality assumes reification as part of its effects, without which no race understanding may proceed. In other words, reification is part of the business of race work, a risk worth taking if the goal is to understand comprehensively what we have made of race and what it has made of us.

Race criticality must first wade through the distortions of racism in order to get to the heart of its matter. This is precisely why reality as lived rather than as it exists in some absolute, ontological sense mitigates against an otherwise idealist pursuit of race reality. And in so doing, any race theory that makes claims about the possibility of ending racism inevitably invokes utopia, which is not merely a dream but one that wants to be realized (Ricoeur 1986). However, a racial utopia represents race reality as more than itself, a projection of a possible state of affairs that is not racist. Race criticality is then wedged between, on the one hand, racial oppression that negatively distorts and makes uncertain at every turn our ability to understand its true nature, and on the other, racial liberation that positively distorts race reality toward some imaginable “not yet.” Race criticality mediates both poles of the dialectic between surplus hopelessness within racism and surplus hopefulness in racial utopia.

A language of critique in race criticality is premised on the analysis of what Freire (1993) once called “limit situations.” In racial terms, criticality aims to understand the nightmare, where racial domination is real and defines the primary limit situation. It requires that even before students are encouraged to make sense of racial oppression, and recruit science to objectify and explain it, race criticality recognizes the importance of witnessing the concrete historical experience of racism, of how the human body registers it (Said 2000). This does not mean that the experience speaks for itself, which therefore requires theory to illuminate it. Before illuminating it, theory must speak *through* the victim and not just *about* him, which is to say, racial oppression is a material form of suffering. Dehumanization through racism is historical, not just a feeling or psychological injury absent a social condition that produces neuroses on both sides of the aisle (Fanon 1967). It is the subversion of human essence and race criticality is not the pursuit of a certain elusive species-being but the acknowledgment that no human thrives within an oppressive condition that thwarts his potential. Racism is not just an inconvenience but prevents human development and becoming from unfolding. It is the negation of humanity, which becomes the negation of education if we follow its logical conclusion. To recall Marx, we need the negation of the negation.

Not unlike Habermas’s treatise on communication, race criticality assumes a systematic distortion of social relations exists. In Habermas’s (1994) study of the pragmatics of communication, he finds that, as a pejorative condition of possibility, ideology is structured into human attempts to conduct rational communication. This is different from suggesting that communication is always a bit out of sync, a bit distorted. That communication is systematically distorted takes the analysis from psychology to sociology, of studying communication at the social level. Likewise, racism is not only a frustrating process whereby racialized people fail to understand one another despite good intentions. Race criticality assumes that racial stratification is not random but predictable and unevenly distributed. Therefore, it does not promote the notion that increased understanding bridges the racial gap; it asks the fundamental question regarding the systematic absence of clear understanding in the first place or what seems to prevent it. In fact, the opposite may be more accurate: Whites and people of color understand very well what is at stake. This does not suggest a lack of understanding but a strategic deployment of communication not found at the level of intentions but the collective racial unconscious (Leonardo 2006). Equally so, it is not premised on a sinister assessment of Whites as people with ulterior motives who bedevil people of color into believing their justifications. This gives the first too much power and constructs the second as racial dupes. The implication is more modest insofar as Whites distort the basis of race reality and people of color insist on unveiling it.

Furthermore, it does not support the otherwise common-sense assumption that distance among the races must be bridged through increased contact or cultural exchange. Members of different races experience disconnect with one another, leading Blauner (1972) to assert that there are two languages or modes of racial understanding: one White, the other Black. This is not merely an issue of distorted communication (that is, a lack of understanding), but a systematic problem of ideology and group interests. Other than promoting increased humanization, it is not in White interest to understand racism accurately, which does not mean that it is beyond their reach. To engage Whites in race criticality because it humanizes them is premised on two problematic trends. One, it reminds us that “racial progress” implies Bell’s charge that change historically lines up with White benefit – in this instance the promise of humanization – whereas the opposite is more accurate of real racial progress, White loss of advantages. Two, convincing Whites that they benefit through humanization downplays the difficult task of divesting in racial power, which is not so much a narrative of White “human benefit” but a Kantian moral imperative. Whites do not divest in power because they gain their humanity in the process but because they are morally compelled to do so.

The narrative of humanization prepares Whites for gains rather than losses or what they would have to give up. It is generalist in terms of social policy in William Julius Wilson's (1987) sense of winning the consent of all the races involved, including Whites. This is reasonable in light of pragmatic concerns with justice but this is where an ideal, *universalist* ethic differs precisely from a *generalist* one. The latter is an ethic that projects clearly *whose* life will be altered by the changes rather than the Rawls (2005) position that agents should be separated from moral postulates so that no one knows who will be affected in this or that way, recommending the true universality (rather than generality) of the proposed changes. That established, it does not follow that people of color always have a "correct" grasp of race relations, but it is not to their benefit and rather their demise to misunderstand it. Increased contact among the races does not suffice if by that we mean a pedagogy that encourages community without addressing the ideological interests that systematically distort the basis of contact, whose source is explained at the plane of social formation and not at the interpersonal level. Certainly, racial tourism around the world increases contact but a colonialist ideology only puts more distance between White travelers and what they conveniently call "indigenous people" of the globe. Whites arrive at the scene with colonialism already interpellating their subject formation. A pedagogical tourism that celebrates the racial other does not bridge the gap but colonizes and romanticizes the other. Seen this way, racial understanding does not happen in a vacuum and requires not an interpretation of the self but a racial hermeneutics.

To the extent that race criticality requires a critique of ideology and poses the problem of oppression, it also requires a language of utopia or the possibility of transcending racist relations. This double move recognizes that racial oppression is incomplete, that an equally incomplete agency is possible. A language of racial utopia is prescriptive rather than descriptive. Although educators have enough evidence at their disposal to describe the reality of racism, liberation from it is not simply imagining the good life absent of racism's symptoms. Although it may go a long way, envisioning racial utopia is not free of contradictions. Like Habermas's idealist framework for addressing systematic ideological distortion in communication, race criticality projects utopia as a regulative ideal, a prescription that guides thought and action rather than a descriptive theory about a post-racist formation based on removing the racial obstacles that currently lie in our way. Removing the known structures of race is necessary but insufficient since our very understanding of them is enmeshed in their double binds. It is for this reason that racial utopia is beyond our grasp and must be posed as a possibility rather than a concrete known. This is where race criticality differs from race conservatism, where the second assumes that a color-blind utopia has been all but achieved.

For instance, there is much discussion about the proper, formal origin of racial strife. As noted, Marxists consider race as a species of class, therefore racial division is born from the antagonisms found in capitalism. This means that race is an extension of class and distorts our understanding of the real issue at hand in exchange for the real-seeming. However as Amin (1989) and Bonilla-Silva (2005) suggest, if it is true that race originates from a class project, it has since gained autonomy and lives an independent life of its own that no class analysis can fully grasp. In another vein, Roediger (1991) finds that race and class work in unison and U.S. capitalism as a particular historical form of race organization becomes a racial opportunity structure for hitherto derogated White ethnics, like the Irish. Not to be outdone, Martinot (2002) analyzes U.S. capitalism as a species of race insofar as proletarianization, properly understood, happened after the creation of race. In short, enslavement is precisely the absence of a working class that sells its labor power for wages. Here he shares an insight with Miles but opposite the Marxists, Martinot argues that class in the U.S. context originates in race. In an integrative approach, Grosfoguel's (2007) extension of Wallerstein's world systems analysis regards race and class as inseparable spheres, more accurately theorized as a "power package." All this points to the difficulty in arguing for an originary explanation of race and its relationship with other social formations like class.

Not to sidestep the importance of discussions around ontology and issues of origin, a language of racial utopia recognizes the existence of race and racism. Like a fire in the room, one does not ask from where it originated in order to make the reasonable intervention to stamp it out, which is premised on the primary recognition that it exists. Although there is something to be said for forensic analysis in determining the culprit for the fire, it seems that the more significant goal is extinguishing it with a sense of urgency. Moreover, pointing out the racial fire is not contradicted by our inability to put it out. In the absence of an extinguisher or other flame retarding solvent, one is morally bound to sound the alarm or warning without possessing the tools to smother the fire. The longer one waits to address the fire in the room, the more reasonable to assume that it will get bigger and out of control. The same can be said of race relations and its cauldron of racism. Of course, the color-blind educator would scrutinize the reality of the fire in question (Does it really exist?), which may only lead to her being engulfed by the flames – or worse, the rest of us.

A discourse of race utopia is premised on a critical rather than cynical understanding of race. It is the projection of a possible world that is arrived at through liberatory and not celebratory pedagogies because there is little about race to celebrate. Race is a several centuries-old injury that humans, particularly citizens in the U.S., have learned with which to cope. So the end goal of a critical understanding of race is to liberate its subjects from *race as an organizing principle of*

society. But this is different from the color-blind position that we may end race simply by turning a blind eye to it. Instead education may organize a struggle along racial lines with a desire to end race. Because of race's bad pedigree (Outlaw 1990), it is difficult, but imperative, to imagine a utopia without the perpetuity of race. So a race utopia is precisely the absence of race as the very condition of its possibility. This is utopia as a projection of reality that is better than itself. But it is not utopia as a form of idle dreaming, a wishful thinking, but a dream that wants to realize itself, without which society loses a sense of goals and direction (Ricoeur 1986; Leonardo 2003). What is the end goal of race criticality? Hirschman (2004) argues that a condition of race without racism is an anachronism. Here he might approach the Marxist position that race is only an ideology, made real in its material expression through racism. Although an idea may certainly be expressed in material forms and therefore not merely ideological or stuck in the quicksand of ideality (Althusser 1971; Leonardo 2006), without racism or racial hierarchy, race ceases to function because its fundamental reason for existing has been extinguished. It is like Whiteness without racial advantage; its lifeline has been severed. White without racial advantage is White no more. In the final instance, race by any other name beside racism is not race at all. Once achieved, race utopia is a raceless reality. This does not suggest that a grand Utopia has been established but certainly a major fire has been addressed.

Whether or not race utopia is plausible is beside the point. That it is preferable and therefore possible seems more significant. Its annunciation regulates educators' actions and decisions toward an end goal that is preferable even while it is neither inevitable nor always actionable. Race utopia may be a dream, but like most dreams it is elusive, incomplete, and in constant motion. It is to dream in order to be something else, to be different from how we currently know ourselves. So it is a dream that wants to graduate to reality. A race utopia ponders what Giroux (2008) has always asked: "What has society made of us that we no longer want to be anymore?" Race criticality cannot afford to develop without the opposite pole of ideology critique. A utopian project appropriates the best aspects of the enlightenment tradition that imagines a condition of emancipatory possibilities and the postmodern deferral of justice. A raceless utopia may never arrive, and as Gordon remarks, the critical race pedagogue participates in the reconstruction of a world that he will never inhabit.³ It is precisely a racial interpellation to which educators respond in order that future generations do not have to answer by that

name any longer. Race criticality is not only a project (noun) but equally a projection, to project (verb) into the not yet.

Abstract Particularity and Concrete Universalism

The dialectics of race pedagogy assumes, on the one hand, the particularity of individual or group experience with racialization, and on the other, the universal or aggregate themes common among different groups. Each racial experience is unique insofar as the dynamics of social interaction is difficult to predict and standardize. Experiences are context-specific to the racial project and formation of a given society, which includes both the structures that make race a material force as well as the cultural representations that drive the meaning of social intercourse among racialized bodies (Omi and Winant 1994). In other words, race criticality recognizes the boundedness of cultural and racial relations, which is to say, differences along the color line cannot be collapsed with one another or analogized without a tragic sense of irony. The particularity of racial forms speaks to the unevenness of the racial process, its flexibility, its historical nature (Leonardo 2004a). However, remarking on race's temporal-spatial organization and modes of expression does not vitiate against the notion that there are universal aspects that bind them together and which speak to their general form. In other words, although the face and intensity of racial oppression may vary among groups, they maintain a family resemblance with each other. In the final instance, different racial experiences are not incommensurable.

Because racial understanding begins with local and bodily experience, students' immediate surroundings form the condition of possibility for race criticality. The material situation of race makes it possible to (re)cognize the uniqueness of the concrete themes that people understand and which resonate with their lived reality. For example, race is understood differently across geography. Living near the border between the United States and Mexico is different from negotiating the northern border with Canada. In the former, the discourse of race is articulated with issues of immigration captured in hyperbole by Huntington's (1998) "clash of civilizations" thesis where Mexico is perceived as a threat to U.S. modernity. In the latter, Canada poses less a threat and more an alternative as U.S. citizens disenchanted with U.S. global imperialism consider the move to the north. U.S. Americans who do not have explicit ties to Mexico are not accustomed to regarding the south as a viable alternative; more often it is perceived as the source of the problem. This dynamic is particularly salient in the U.S. southwest where the border with Mexico is perceived as real whereas the one with Canada is abstract, unless we are talking about the fear

³ Lewis Gordon delivered a keynote speech for the Latina(o) Academy of Science and Arts meeting on May 2, 2008. Berkeley, CA.

of terrorism after 9/11. The difference is that fears of terrorism do not reduce Canadians above or below the border into a menace whereas immigration hysteria transforms Mexicans on both sides of the line into “alien” threats.

Race criticality affirms the abstract particularity and concrete universality of racial experience. Without recognizing the first, race criticality is unable to help young students deal symptomatically with their daily experience. It is through the particularity of racial experience that meanings derive their force, where the body registers the marks of oppression. But the concreteness of this immediacy has to leave the body, as it were, and become abstracted because meaning has to be objectified through a system of signs that is public and social. It is as if experience at the bodily level is too concrete, too private, and must become public in order to find its larger significance, its broader human correlates. It speaks to the limitation of “experience” as the sole basis for understanding since experience never speaks for itself but through a complex relationship that reminds educators of the interplay among institutions, culture, and meaning. The body never forgets the experience but we may say that it requires the work of language to remember it. At this point, the universality of racial oppression arises and different racial groups are able to dialogue about the general themes of racial suffering: e.g., infantilization, derogation, alienation from others, self-hatred, unmet needs, misrecognition, and social constraints. Racial suffering becomes a social problem and leaves the flesh to become part of the body politic.

Universality allows subjects to transcend the confines of their experience in order to create a larger sense of humanity that starts with self-understanding but does not end with it. The abstraction of particularity aids in this process as students learn that they are not alone and their experience is unique without being idiosyncratic. That said, an abstract universality will not suffice in a race criticality for it reduces the human to an idea rather than a brute, historical fact. The fact of raciality is a concrete universal, what Benhabib (1987) may have captured in the phrase “concrete generalized other.” It means that despite the distance between the self and other, this crevasse is not insurmountable or ultimately strange, particularly among people of color. However, Whites are often unable to travel the distance required to know the lived realities of people of color and how racism has impacted their lives. White empathy for people of color requires a language of impossibility in order to avoid White colonization of minority experience. It is always a bit out of reach, which requires humility from Whites as they begin to understand racial oppression. They may understand it by relating race to another form of systematic exclusion based on class, sexuality, or gender, thereby touching on the universality of suffering. But they cannot know the particularities of being a racial minor because being a racial major represents precisely this gulf.

On the other hand, inter-minoritarian relations are more proximal, having to go a shorter distance. They require lateral understanding, which is less difficult than a vertical one. Racial oppression among minorities may differ but it is more accurate to say that, compared to one another, they are horizontal relationships with White supremacy (Leonardo 2004b). Racial minorities have some basis for understanding each other’s experience without embodying the very same experience. Asian Americans may understand intellectually the fact (rather than legacy) of slavery but cannot at the level of the flesh capture this lived difference. Some Asian Americans do not carry the burden of colonization against which Latinos continue to struggle. Latinos may not know what is like to be orientalized or interned but share with Asian Americans the status of “perpetual foreigner” (Wu 2002). African Americans may fail to appreciate the role that land plays for Native American sovereignty on U.S. soil. In fact, Black mobility as metaphorized in the failed promise of “40 acres and a mule” or the sharecropping industry that materialized during Reconstruction was dependent on the acquisition of land – in some cases, Indian land. There are plenty of contradictions to go around if educators analogize one group’s history with another, ignoring its specificities. Race criticality may begin the discussion with specific forms of oppression but it does not end there.

Racial minorities in the U.S. may transcend these differences because they are and have been vulnerable to White supremacy at *any point in their history*. They may partake in real struggles with each other but it is clear to them that their fight is for second (or seconds, in the sense of resources Whites are willing to give up). This does not make solidarity among them a given, what Vaca (2004) calls a “presumed alliance,” but something that has to be established and struggled over if their universal interest in racial emancipation is their long term goal and not securing relative advantages over one another. This means that without presuming alliance, we may presume interest convergence.⁴ Young students need help understanding this dynamic as they experience a racially fragmented school life where racial cliques develop in the play yard. Students of color exist in a context where they learn to fear one another rather than learning their common experience as Other. This is largely due to housing segregation where Whites are out of sight and therefore out of mind and youth of color victimize each other. It is the epitome of self-loathing that threatens not just the possibility of solidarity, but daily co-existence. As they mature, students of color appreciate that their fear of one another is coterminous with

⁴ Here I am using “interest convergence” differently from CRT, and Derrick Bell particularly. I am using the phrase to suggest the idea that people of color have overlapping interests that converge during strategic moments in history, such as the Civil Rights Movements.

their self-fear, an ironic and internalized suspicion of themselves as they retreat from their co-denigrated fellows. As a defense mechanism, they one-up each other on hierarchies of oppression, insisting on their particularity in a lottery where there is no winning ticket, which further divides them. They create supernationalisms that smack of essentialisms that would incense someone like Althusser and his collaborators (Balibar and Wallerstein 1992). In the end, solidarity may require them to give up something in order to gain more in the end, such as any group's claim to ultimate victimhood.

Race criticality that respects the particular claims to victimhood does not reject them out of the need for universal solidarity. This violates one of the first principles of critical race dialogue: listening. There are historical antecedents for a group who legitimately claims the status of the "faces at the bottom of the well" (Bell 1992) or "bottom of the totem pole" (Prashad 2000). The charge is based on specific yet collective memories of group experience. More important, the claims to superoppression ward off potential minimization of the suffering's severity. Any move to suggest that a group's racial oppression does not merit ultimate victimhood proceeds down the slippery slope of not taking its history seriously. African American reminders of slavery frequently meet incredulous glances; Native American charges of genocide fall on deaf ears; Mexican Americans claiming U.S. takeover of the southwest labels them as "sore losers"; and Asian Americans who call for full citizenship status are branded as "ingrates." The reactions remind these groups that they are the vanquished and should consider themselves fortunate to participate in U.S. life rather than the more accurate narrative that "America" would not exist without their exploitation and the appropriation of their labor (see also Takaki 1993).

These claims must not be reduced to mere differences among racial minorities so as to give the impression that one experience is transposable into the others. Race criticality observes their radical difference in order that the group becomes *different again* through a discursive blend that recognizes the specificity of their experience and the universality that they share with other oppressed groups. It does not ask them to regard their experience through the lens of a dominant conception of racial alterity, to be the same as another. In this condition, the self is not the opposite of the other but is inflected and completed by the other. In essence, race criticality expands the notion of oppression so that claims are recognized without privileging one over the other, the results of which have prevented cross-racial solidarity. This move prevents existential insularity, of being alone in the world despite the comfort of one's group affiliation. As Said (2000) reminds us, it also prevents the dangers of self-pity that comes with the territory of ultimate victimhood status, particularly for the exile. Finally,

race criticality recognizes the coherence of the whole, of linking the levels of racial analysis from the particular, without descending into particularism or singularity, to the totality, without becoming totalitarian.

Between Race Immersion and Abolition

A critical understanding of race assumes that emancipation from racism is only possible with further immersion into race discourse. This means that grappling with race and racism requires that education enters their explanatory frameworks and to suggest otherwise becomes a form of evasion typical to color-blindness. To the extent that race is an interpellating system that calls on educators to respond and recognize themselves within its logic, race criticality asks teachers and students to enter the house of race despite its contradictions. In saying this, educators both willfully and by default become subjects of race. Particularly in the United States, race is such a dominant relation that avoiding its gravitational pull takes hard work, suggesting that color-blindness may be normalized (that is, hegemonic) but is by no means normal (Leonardo 2007). It takes a lot of effort to claim racelessness when social processes from dating to mating (made obvious by anti-miscegenation laws), material production to knowledge construction (showcased by the cultural wars), and happiness to 'nappiness' (reinvigorated by the recent ludic Don Imus shock jock controversy) make race plain to see. Race criticality does not stop at the suggestion that educators allow race to wash over them as they internalize the relation. It is to admit that objective, material oppression is incomplete at worst and inefficient at best without subjectification, of transforming human subjects into racial subjects. By entering the struggle willfully, educators learn the intricacies of the racial project, which enables them to pose the basic question, "What has race made of me?" Only then can they enter the struggle but not in order to continue it, rather to end it, or affirm the utopic appeal of race criticality. Understanding race may lead to the goal of abolishing the relation. Abolishing race relations comes with the concomitant abolition of the racial self.

Engels once suggested that people who are not from the working class must enter the sphere of industrial labor in order to experience history and the contradictions of capital (see Mills 2003). Engels' suggestion is typical of Marxist orthodoxy to define history as the movement and resolution of the primary contradiction between labor and capital, the primordial cleavage between the proletariat and bourgeoisie. Other relations are significant but not history making and therefore participation in labor, rather than defining other social spheres as equally "productive," becomes the clearest path to enter class struggle in order to end it. Only then will

non-working class people sense the urgency for developing a scientific understanding of productive relations. One might ask an obvious question: “Doesn’t that just create more oppressed people?” First, we must recognize that middle class people are not free from oppression but rather receive benefits *relative* to the working class. As long as they accept this intermediary position, they will have difficulty understanding that they do not benefit in absolute terms from capitalism, a position that belongs to the bourgeoisie. Second, members of the middle class are already implicated in labor because they are vulnerable to economic shifts and crises. They are one step away from becoming working class if capital deems it necessary. In a sense, *it is coming for them too*. Third, as ideologists the middle class contributes to the exploitation of industrial labor insofar as they depend daily on the material goods it produces, without which much of their life would halt (Mills 2003). For these reasons, entering class struggle means siding with labor.

In race relations, analogies with this line of thought could be drawn. In general, race possesses an objective existence. It is not only in people’s heads or exists purely as an idea. Although not real as a concept, race’s modes of existence are real. We invest it with institutions, such as schools and workplaces. It may be a product of White dementia dating back to colonialism and solidifying at the turn of the 1800s in the United States, but now it contains lived dimensions, none of which could be wished away through critique. That said, Marxists are correct to warn educators of the reifying tendencies in everyday and folk knowledge of race. Although pedagogical understandings of race have moved on from their biological moorings to a social plane, there is much about race commonsense that projects its foreverness, its eternal status as a relation. For most educators, deploying the post-race discourse is treated as an apostasy. They may as well equate rap with Shakespeare and find more reception. But if Hirschman and Outlaw are correct that race has a dubious beginning and a questionable pedigree, it stands to reason that immersion into does not preclude emerging from race to become something else. Like late capitalism, late raciology may be reaching its maturity, not in the sense of a wiser state of mind but a breaking point. However, to Marxists’ chagrin, race criticality does not project race as merely a reification. Indeed, most critical, self-reflective scholars of race already presume race’s problematic status and *risk reification* in order to understand its structuring effects. Ultimately, race criticality is a practice of humility in order to comprehend the extent of racial humiliation that people of color suffer.

Race criticality considers it worth the risk to misunderstand racialization, without which no understanding of race can be gained. In other words, less than this requirement hardly accounts for race or counts as race analysis. This is the intrinsic value of learning that most educators uphold.

At its best, education provides its subjects the opportunity to learn what they have become and any project of unbecoming must first reckon with this phenomenological question. Avoiding this step ensures that race remains the pink elephant in the room. Branding race as only an illusion misses its very *modus operandi*: its invention of a new subject of history. Critical race scholars recognize the problematic relation between race and ontology. They believe it is *not* natural to classify people along the color line but map out the reasons why so many communities, scientific or not, believe it justified to organize themselves according to skin color. Only by immersing oneself in a racial worldview can educators begin to grapple with the illogics of race parading as natural. Avoiding it as unreal does not explain how it functions as a real relation in people’s daily lives. As Althusser (1971) may have asked, “If it functions, how can it merely be false?” It is a bit like teaching a student to learn basketball by playing soccer with him. Not only will he fail to understand the former, he will also be unable to transform or change it. The game goes on without him.

Race relations is a sordid story. It is a checkered history of exclusionary practices even when educators factor in the moments of response from people of color to countervail such attacks. Resistance to racism exists because of the preceding condition of racial stratification, which responds to resistance with appropriate doses of power in order to maintain a racial order. Without determining the expression of resistance, racism makes it possible and prefigures it. It is also commonly asserted that a Black-White binary exists. That is, there are two historical, dialectical races whose tensions and contradictions drive the motor of history. Blacks think overtly through race and Whites explicitly deny its existence. They form the associative poles in race relations and other groups often are not just recognized when their experiences approach one or the other, they are *only* recognized when they do so. As a result, other groups count as quasi-races and Latinos, Asian Americans, Native Americans and other would-be races are implicated within the binary. For example, as Part II of the video series “Race: The Power of an Illusion” (Strain 2003) clearly documents, when the United States “annexed” the Philippines from Spain at the turn of the twentieth century, U.S. propaganda portrayed the Filipinos as African-like, sometimes Native American-like, two groups whose faults with which White Americans were familiar. The specificities of the Black-White binary cannot be razed summarily without certain costs due to its history and awesome implicationary reach. While it is reasonable to level critiques at the binary’s simplifications, it is equally difficult to ignore its implications. Immersion into race criticality requires dealing honestly with the way that race relations is framed within this binary. Non-Black minorities occupy an ambiguous, and sometimes ambivalent, position in this uptake.

If it is accurate to depict race history as built on a spurious relation that ostensibly benefits Whites in an absolute way, oppresses and then doles out relative advantages among the minority races, why would non-Black minorities want to enter the race for race? If we know what race relations has done to Blacks worldwide and African Americans in the United States, why would Latinos and Asians opt for race, knowing full well what they can expect? Answering the racial call appears to do the work of the oppressor. Indeed, it is quite reasonable to opt out of race rather than immerse one's group into it. There are several explanations why avoiding race for these reasons is problematic. One, race is objective and is forged in the historical process rather than a matter of individual choice. A person may resist it but in no way prevent its power to recruit him. It works with or without his consent, with or without his intent. A person of color could ignore it, pretend it does not include him, practice color-blindness, but because Whiteness is an "exclusive club" (Ignatiev and Garvey 1996) he becomes a target of its discipline. Asians and Latinos may be honorary or probationary Whites at certain points in their racialization, but their Whitening is ultimately tenuous and may be recanted at any moment at the whim of Whiteness. Racialization knocks at the door from the inside out and you enter its house, sometimes begrudgingly. Two, taking a racially neutral position is arguably a form of racialization. Within the U.S. racial binary, this is usually interpreted as an anti-Black stance because it falls within the repertory of a White racial worldview. Color-blindness is the ability (sometimes the privilege) to feign as if race does not affect one's life chances.

Three, as mentioned, because the United States is so deeply racialized a group's claim to injury is not recognized until it becomes racialized, or participates in a racial narrative. Even in the case of Mexican American (an ethnicity) charges of land takeover, Mexicans stand in for Latino, particularly in the Southwest. In other words, the prototypical U.S. image of Latino is increasingly Mexican. To be racialized in the U.S. context is to become visible and this pressure becomes overwhelming if a group wants to be part of the national dialogue, even in a derogated fashion. It is a tough choice between utter invisibility and a derogated visibility for groups of color. Although in the case of racial minorities visibility means their (mis)recognition as a subperson, it is a different thing altogether to be a non-person, a non-racialized person. Whites may attempt to disappear as racialized humans, but people of color who attempt this move do not subvert the fact of their color. It haunts them.

Freire did not concern himself much with racialization. He focused instead on either class relations or universal liberation. To the extent that he missed an opportunity to deal specifically with racial divisions in a Brazilian context, Freire's political and intellectual project was incomplete. However, even with this blind spot, bell hooks (1993) finds

that Freire taught her more about emancipation than any U.S. White feminist ever could. Freire's (1993) thoughts on liberatory pedagogy are still useful for a discussion of race insofar as we are able to racialize them, which is consistent with the Freirean project of appropriation. It is of some import that Freire spoke of oppressed people's fear of liberation because of their self-apprehension as capable human beings in the search for freedom. Likewise, race criticality finds purchase in the insight that racially oppressed groups do not only need courage but the ultimate self-sacrifice from being something to being nothing. Racially speaking, they have been made into something not wholly of their choice but certainly inhere the possibility of choosing to become something else. White positionality makes it difficult for Whites to accept Ignatiev's (1997) call for the abolition of Whiteness. Taking from Sartre, the move from being to nothingness is perhaps the best metaphor for race criticality, a project wherein the subject affirms race in order then to disappear. In the end, race criticality is confirmed ultimately by the slow disappearance of its own craft.

Note on Contributor

Zeus Leonardo is Associate Professor in Social and Cultural Studies in Education and Affiliated Faculty of the Critical Theory Designated Emphasis at the University of California, Berkeley. He has published several dozen articles and book chapters on race and educational theory. He is the author of *Ideology, Discourse, and School Reform* (2004), editor of *Critical Pedagogy and Race* (2005), and co-editor of *Charting New Terrains of Chicano(a)/Latino(a) Education* (2000). His articles have appeared in *Educational Researcher; Race, Ethnicity, and Education; and Educational Philosophy and Theory*. His recent books are *Race, Whiteness, and Education* (2009) and the (2010) *Handbook of Cultural Politics and Education*.

References

- Althusser L (1971) Lenin and philosophy (trans: Brewster B). Monthly Review Press, New York
- Amin S (1989) Eurocentrism. Monthly Review Press, New York
- Balibar E, Wallerstein I (1992) Race, nation, class. Verso, London
- Bell D (1992) Faces at the bottom of the well: the permanence of racism. Basic Books, New York
- Benhabib S (1987) The generalized and the concrete other. In: Benhabib S, Cornell D (eds) Feminism as critique. University of Minnesota Press, Minneapolis, pp 77–95
- Bernasconi R, Lott T (eds) (2000) The idea of race. Hackett Publishing, Indianapolis
- Blauner R (1972) Racial oppression in America. Harper & Row, New York
- Bonilla-Silva E (2005) "Racism" and "new racism": the contours of racial dynamics in contemporary America. In: Leonardo Z (ed) Critical pedagogy and race. Blackwell, Malden, pp 1–35

- Cho S (2008) Politics of critical pedagogy and new social movements. *Educ Philos Theory* 42(3):310–325
- Churchill W (1995) *Since predator came: notes from the struggle for American Indian Liberation*. Aigis Publications, Oakland
- Cole M, Maisuria A (2007) ‘Shut the f*** up’, ‘you have no rights here’: critical race theory and racialisation in post-7/7 racist Britain. *J Crit Educ Policy Stud* 5(1). Online: <http://www.jceps.com/?pageID=article&articleID=85>
- Darder A, Torres R (2004) *After race*. NYU Press, New York
- Dixson A, Rousseau C (2005) And we are still not saved: critical race theory ten years later. *Race Ethn Educ* 8(1):7–27
- Eagleton T (1991) *Ideology*. Verso, London
- Essed P, Goldberg DT (2002) Introduction: from racial demarcations to multiple identifications. In: Essed P, Goldberg DT (eds) *Race critical theories*. Blackwell, Malden, pp 1–11
- Fanon F (1967) *Black skin white masks* (trans: Markmann C). Grove Weidenfeld, New York
- Fields B (1990) Slavery, race and ideology in the United States of America. *New Left Rev* 181:95–118
- Freire P (1993) *Pedagogy of the oppressed* (trans: Ramos M). Continuum, New York
- Gillborn D (2008) *Racism and education: coincidence or conspiracy?* Routledge, New York
- Gilroy P (2000) *Against race*. Harvard University Press, Cambridge
- Giroux H (2008) Beyond the biopolitics of disposability: rethinking neoliberalism in the new gilded age. *Soc Identities* 14(5):587–620
- Goldberg DT (1990) The social formation of racist discourse. In: Goldberg DT (ed) *Anatomy of racism*. University of Minnesota Press, Minneapolis, pp 295–318
- Goldberg DT (1993) *Racist culture*. Blackwell, Malden
- Grosfoguel R (2007) The epistemic decolonial turn: beyond political-economy paradigms. *Cult Stud* 21(2):211–223
- Habermas J (1994) *Ideology*. In: Eagleton T (ed) *Ideology*. Longman, London, pp 190–201
- Hirschman C (2004) The origins and demise of the concept of race. *Popul Dev Rev* 30(3):385–415
- hooks b (1993) bell hooks speaking about Paulo Freire – the man, his work. In: McLaren P, Leonard P (eds) *Paulo Freire: a critical encounter*. Routledge, New York, pp 146–154
- Huntington S (1998) *The clash of civilizations and the remaking of world order*. Simon & Schuster, New York
- Ignatiev N (1997) The point is not to interpret whiteness but to abolish it. Talk given at the conference on “the making and unmaking of whiteness.” University of California, Berkeley, Retrieved from <http://racetractor.org/abolishthepoint.html>
- Ignatiev N, Garvey J (1996) Abolish the white race. In: Ignatiev N, Garvey J (eds) *Race traitor*. Routledge, New York, pp 9–14
- Kant I (2000) *The critique of judgment* (trans: Bernard JH). Prometheus, New York
- Ladson-Billings G (2004) Just what is critical race theory and what’s it doing in a nice field like education. In: Ladson-Billings G, Gillborn D (eds) *The routledge falmer reader in multicultural education: critical perspectives on race, racism and education*. RoutledgeFalmer, New York, pp 49–67
- Ladson-Billings G, Tate WF (1995) Toward a critical race theory of education. *Teach Coll Rec* 97(1):47–68
- Leonardo Z (2003) Reality on trial: notes on ideology, education, and utopia. *Policy Futures Educ* 1(3):504–525
- Leonardo Z (2004a) The souls of white folk: critical pedagogy, whiteness studies, and globalization discourse. In: Ladson-Billings G, Gillborn D (eds) *The routledge falmer reader in multicultural education: critical perspectives on race, racism and education*. RoutledgeFalmer, New York, pp 117–136
- Leonardo Z (2004b) The color of supremacy: beyond the discourse of “white privilege”. *Educ Philos Theory* 36(2):137–152
- Leonardo Z (2006) Through the multicultural glass: Althusser, ideology, and race relations in post-civil rights America. *Policy Futures Educ* 3(4):400–412
- Leonardo Z (2007) The war on schools: NCLB, nation creation, and the educational construction of whiteness. *Race Ethn Educ* 10(3):261–278
- Martinot S (2002) *The rule of racialization*. Temple University Press, Philadelphia
- Miles R (2000) Apropos the idea of ‘race’. . . again. In: Back L, Solomos J (eds) *Theories of race and racism*. Routledge, New York, pp 125–143
- Mills C (2003) *From race to class: essays in White Marxism and Black Radicalism*. Rowman & Littlefield, Lanham
- Nayak A (2006) After race: ethnography, race and post-race theory. *Ethnic Racial Stud* 29(3):411–430
- Omi M, Winant H (1994) *Racial formations*, 2nd edn. Routledge, New York
- Outlaw L (1990) Toward a critical theory of “race”. In: Goldberg DT (ed) *Anatomy of racism*. University of Minnesota Press, Minneapolis, pp 58–82
- Parker W (2005) Teaching against idiocy. *Phi Delta Kappan* 86(5):344–351
- Parker L, Stovall D (2005) Actions following words: critical race theory connects to critical pedagogy. In: Leonardo Z (ed) *Critical pedagogy and race*. Blackwell, Malden, pp 159–174
- Peters M (1995) *Education and the postmodern condition*. Bergin & Garvey, Westport/London
- Prashad V (2000) *The karma of Brown Folk*. University of Minnesota Press, Minneapolis
- Rawls J (2005) *A theory of justice*, Revised edn. The Belknap Press of Harvard University Press, Cambridge
- Ricoeur P (1986) *Lectures on Ideology and Utopia*, Ed. G. Taylor. Columbia University Press, New York
- Roediger D (1991) *The wages of whiteness*. Verso, New York
- Said E (2000) *Reflections on exile*. Harvard University Press, Cambridge
- San Juan E Jr (1992) *Racial formations/critical transformations*. Humanities Press, London
- Scatamburlo-D’Annibale V, McLaren P (2004) Class dismissed? Historical materialism and the politics of ‘difference’. *Educ Philos Theory* 36(2):183–199
- Strain T (producer) (2003) *Race: the power of an illusion*, Part II (Video). California Newsreel, San Francisco
- Takaki R (1993) *A different mirror*. Little, Brown and Co., Boston
- Tate W (1997) Critical race theory and education: history, theory and implications. *Rev Res Educ* 22:191–243
- Taylor E (1998) A primer on critical race theory: who are the critical race theorists and what are they saying? *J Blacks High Educ* 19:122–124
- Vaca N (2004) *The presumed alliance*. Harper Perennial, New York
- Wilson WJ (1987) *The truly disadvantaged*. The University of Chicago Press, Chicago
- Wu F (2002) *Yellow*. Basic Books, New York
- Yosso T (2006) *Critical race counterstories along the Chicana/Chicano educational pipeline*. Routledge, New York

Gloria Ladson-Billings

Abstract

In what ways, and on whose terms, might we expect a theory from ‘outside’ to have theoretical and analytic power for understanding inequality in education? As the first of two responses to Zeus Leonardo’s chapter, Ladson-Billings reflects on the various misuses and abuses of Critical Race Theory in the scholarship of educational inquiry. Through telling contrasts with Leonardo’s exegesis, she highlights a lack of deeper connection and criticality that may be detected in other, fundamentally superficial works. Setting aside questions of theoretical propriety and semantics, her response argues that the lived realities of racism compel both theoretical and practical development of research in education that confront – rather than sidestep – the structures of injustice and oppression. In short, if the texts and textures of educational research do not address this, do our questions of context and contextualization become little more than the willful persistence of ‘eyes wide shut’?

Keywords

Criticality • Critical race theory • Race • Normativity • Mainstream scholarship

The word “critical” has become so much a part of the English lexicon that its academic meaning has begun to lose currency. For example, almost every public school in the nation claims it wants its students to develop “critical thinking” skills. However, what schools mean by critical is usually some ability to “find” a less than obvious “truth.” Should a sentence read, “The Emancipation Proclamation declared freedom for enslaved people of African descent living in the Confederate States,” the critical student reader is supposed to discern that the proclamation did not apply to the enslaved people of African descent living in the Union states. Thus, critical thinking becomes a game to be played on a limited field. There would be no place in the exercise to be critical about the institution of slavery itself and pose the question, “What kind of people were those of European descent that would allow them to believe it was permissible

to enslave people in the first place?” The first example is a “critical thinking exercise.” The second is an orientation toward social phenomena that promotes criticality.

When William Tate and I (Ladson-Billings and Tate 1995) first introduced Critical Race Theory (CRT) into education we did so with an eye toward developing a criticality in education regarding race. We understood that the field had many unasked questions and the only way to get to them would be to directly confront the enduring absence of critical inquiry. From our investigation of the literature we found that race was a taken for granted concept very often relegated to the status of a variable. Scholars who were looking at issues of inequity in schooling and academic achievement typically included race as a variable as if it were a fixed and unquestioned concept.

Tate and I decided to look at race as a “sliding signifier” (Lacan 2006) and suggested that a controversial legal theory – Critical Race Theory – could hold theoretical and analytic power for understanding inequality in education. What made this a somewhat radical move was that education, as a field, tends toward more conservative theories and analyses and

G. Ladson-Billings (✉)
Department of Curriculum and Instruction, University
of Wisconsin-Madison, Madison, WI, USA
e-mail: gjladson@wisc.edu

the major tenets of CRT were antithetical to the standard education discourse that is steeped in liberal ideology. In a subsequent article I (Ladson-Billings 1998) cautioned education scholars against rushing to appropriate CRT because of the steep learning curve involved in digesting the legal arguments and then applying them to education. I would argue that I have been unsuccessful. CRT has popped up in countless education articles and chapters and as I feared, its treatment has been superficial and/or misplaced. While Tate and I detailed the major tenets of CRT, we found subsequent articles “cherry-picking” the scholarship and attempting to apply the “tenet du jour” to all manner of analysis. For example, our use of Delgado’s (1999) point on the salience of voice seemed to spur a host of “stories” and narratives that failed to fully grasp the systemic role of race and racism in society. Instead we kept reading individual stories without deeper connections to the way race functions in society. More disturbing for me was the conflation of my more pragmatic work in culturally relevant pedagogy (Ladson-Billings 1994) with the theoretical arguments I advanced using CRT. The critical work of CRT was being swapped out for the every day work of teaching and learning to teach.

In his essay, Zeus Leonardo (2013) surveys the critical landscape in relation to the slippery concept of race. In it he moves deftly along a long continuum from structure to post-structure. The work moves from Immanuel Kant to Michel Foucault. It embraces the more class-based analysis of Darder and Torres (2004) and the more race-centered argument of CRT presented by a host of scholars. But Leonardo does not merely offer a litany of the critical, he dares to interrogate its usefulness in this present age.

At the outset of the essay Leonardo makes the same argument I attempted (perhaps more eloquently) – that critical begins to lose its meaning if everything becomes critical. In effect, if everything is critical then nothing is critical. The very term loses its meaning and power. The term can be loosely applied to any and everything one likes (or dislikes). For example, during a recent visit of a candidate for a faculty position at my institution several graduate students referred to the candidate as “not critical enough.” It was a puzzling statement that was probably better interpreted, “the candidate is using a paradigm and a methodology I disagree with.” Certainly, one could have argued that the candidate’s criticality was at an important level given the rather conservative overall nature of the field s/he studied. The questions being asked, the methodological tack, and the conceptual framework were all critical of the mainstream work in the field without uttering the word, “critical.” Thus, the question of criticality is for me whether one can recognize it without labels and markers. This is an indication of the institutionalization of a discourse or paradigm. Positivist research does not have to declare itself positivist. The hallmarks

of an insistence on “objectivity” and a world that is fixed and knowable belie the need to declare a work as “positivist.” Critical scholars, on the other hand, seem to be constantly self-reflexive in their declarations of criticality. However, I would argue that some of the more insightful and “critical” work has been done without making such a claim.

In 1903 with the publication of *The Souls of Black Folks*, W. E. B. Du Bois established what I would call the “Black Critical Tradition.” I make this claim not only by virtue of Du Bois’ racial identity, but because of his training in Germany during the late 1800s. Although most critical theorists readily acknowledge the contributions of Germany’s Frankfurt School to critical theory, Du Bois is rarely if ever mentioned in the same breath. Du Bois’ analyses of the Atlantic slave trade and Reconstruction are decidedly different from and critical of mainstream scholarship on these topics. His critical approach to history and sociology was seen as “wrong” rather than a perspective from the site of alterity.

Leonardo’s essay points out the tensions between and among various theorists regarding the salience of race in determining inequality and power. The semantic debate about the specious nature of race as a concept is not particularly useful when one is experiencing the effects of racism. Thus, the lived reality of race supersedes the intellectual debate about its existence. The fact that race has discursive power does not diminish its materiality and daily-ness. It is not merely one’s imagination that she pays more for an automobile than her White counterparts. It is not only a discursive move to be stopped by a police officer routinely on the nation’s streets. It is not a social construction to be constantly under surveillance.

The ability to be critical about a concept like race is not a given. More often than not, when a person of color engages in this work the scholarly community defines it in a variety of pejorative ways – the scholar is self-interested, the scholar has an axe to grind, the scholar has a chip on his shoulder, the work is too narrow, the work is too political, or this is not scholarship it is activism. However, White scholars can engage in “race work” and be considered “objective,” “dispassionate,” and “disinterested,” thus providing a “scholarly” analysis untainted by emotion or hysteria.

Carter G. Woodson decided that it made no sense to try to convince a White dominated academy of the value of Black scholars and scholarship. Rather than petition and face rejection from the mainstream Woodson began formulating his own paradigm and research agenda specifically focused on the life and culture of Black people. Woodson’s *Mis-education of the Negro* (1933) became a treatise on what was wrong with schooling in the US for African Americans. Woodson argued that the same curriculum that was telling White students that they were inheritors of a great

intellectual tradition and were a part of a people who had created and invented countless innovations and scientific knowledge was telling Black children that they were nothing, had produced nothing, and should expect to be nothing. Woodson's challenge to the existing order can only be described as critical and, like Du Bois, he did not need to use the term critical to prove his critical credentials.

It seems to me that being critical is less about a declaration than a disposition toward scholarship. What are the questions worth asking? What are the methodological tools that illuminate those questions? What analysis helps to answer those questions? What further research might those questions prompt? The process is both reflexive and recursive. It is not made more powerful by merely slapping a label on it called, "critical." Leonardo's essay pushes the concept of race criticality not as word play but rather as a way to challenge an episteme. How can various other groups of color acquiesce to the construct when they know full well how destructive it has been in the lives of Black people. Why play that particular game? The simple answer is that it is the only game to be played. Like scholar Henry Louis Gates, Jr. remarked when reflecting on Audre Lorde's pointed comment, "You can't destroy the master's house with the master's tools," – "the ONLY way to destroy the master's house is with the master's tools."

Race is not a construct of the powerless or the dispossessed. It functions to keep a particular set of power relations in place and to make whiteness hegemonic and positioned as the site of normativity. However, it can be re-deployed to create a critical praxis that disrupts the status quo. Lani Guinier and Gerald Torres (2002) point out that despite the destructive quality of race as a sense making category, communities of color can use what they term, "political race" to leverage social and political benefits along an uneven playing field. This pragmatic approach to race does not diminish its criticality rather it merges it with political

and social action to make it a more useful tool for fighting oppression.

Note on Contributor

Gloria Ladson-Billings is the Kellner Family Chair of Urban Education in the Department of Curriculum & Instruction at the University of Wisconsin-Madison. She was the 2005–2006 president of the American Educational Research Association. Ladson-Billings' ground-breaking work has been crucial in developing Culturally Relevant Pedagogy and Critical Race Theory applications in education, including to pedagogical practices of teachers who are successful with African American students, and the factors that have led to the "Education Debt" in US schooling.

References

- Darder A, Torres R (2004) *After race*. NYU Press, New York
- Delgado R (1999) Introduction. In: Delgado R, Stefancic J (eds) *Critical race theory: the cutting edge*, 2nd edn. Temple University Press, Philadelphia, pp 2–8
- DuBois WEB (1903) *The souls of black folks*. Penguin Books, New York
- Guinier L, Torres G (2002) *Minor's canary: enlisting race, resisting power, transforming democracy*. Harvard University Press, Cambridge, MA
- Lacan J (2006) *Écrits: the first complete edition in English* (trans: Fink B). W. W. Norton, New York
- Ladson-Billings G (1994) *The dreamkeepers: successful teachers of African American children*. Jossey Bass, San Francisco
- Ladson-Billings G (1998) Just what is critical theory and what is it doing in a nice field like education? *Int J Qual Stud Educ* 11(1):7–24
- Ladson-Billings G, Tate WF (1995) Toward a critical race theory of education. *Teach Coll Rec* 97(1):47–68
- Leonardo Z (2013) Dialectics of race criticality: studies in racial stratification and education. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 247–257
- Woodson CG (1933) *The mis-education of the Negro*. Association Press, Washington, DC

Michael W. Apple

Abstract

In celebrating the critical insights of Zeus Leonardo’s chapter, this response further illustrates why understandings of research in education must attend to the claims, inflections and subversions of history and geography in this ‘other than natural’ field of inquiry. Educational research, be it ‘critical’ or ‘uncritical’ in orientation, is marked by a range of practices always-already implicated in a relational complex of ideas, transactions and possibilities. On these grounds, decontextualized accounts of research, researcher and researched is little more than insidious; more hopefully, the ‘more than’ that is conceivable of educational inquiries in realizing and critiquing their range of uses and functions impels us to transcend the pretence that researchers can remain neutral as to the field’s constitution and reconstitution. A critical historical reading is but one way of bringing this into sharp relief; by simply asking how democratic, engaging and emancipatory educational research actually is.

Keywords

Critical research • Democracy • Critical race theory • Relational concepts • Scholarly criticism

The word “critical” has become a sliding signifier. It now all too often is largely rhetorical. The range of its meanings has expanded so much that I for one would be hard-pressed to say exactly what it means when someone uses it. Like the word “democracy,” it is something of an empty glass into which one can pour various kinds of meanings. There are intense struggles not over the glass itself – since almost everyone thinks democracy is “a good idea” – but over what should be poured into the glass, over what actually counts as democratic (Apple 2006).

As Wittgenstein (1963) reminded us, in cases such as this and others, it is better to determine the meaning of a concept through its use. Thus, it is wise to remember that language has many uses. Wittgenstein was not alone in making this

important intervention. Other analytic philosophers – a tradition we might do well to occasionally return to – such as Austin (1975) pointed out as well that language performs many functions. It can be employed to describe, explain, legitimate, mobilize, control, provide metaphors to envision new possibilities and to hide others, and so on. Of course, this insight into the importance, mutability, and multiple uses of language is ratified as well across multiple philosophical traditions and is one of the guiding principles of the discursive turn in various “post” positions.

I raise these points at the outset of this brief commentary of Zeus Leonardo’s (2013) powerful work for two reasons. First, he is appropriately critical of the ways the word “critical” has been mobilized and used. He seeks to recuperate it so that it regains its analytic and political power. Second, by building on and extending traditions such as Critical Race Theory (CRT) and other analyses of the relationship between “race” and power, his articulation of a position of

M.W. Apple (✉)
Department of Curriculum and Instruction and Educational Policy
Studies, University of Wisconsin-Madison, Madison, WI, USA
e-mail: apple@education.wisc.edu

“race criticality” is insightful and provides cogent ways of rethinking what it means to be critical about “race.”

A number of years ago, I read an influential book by the legal scholar and my then colleague at Wisconsin, Patricia Williams, *The Alchemy of Race and Rights* (Williams 1991). The volume powerfully combined the personal and the “academic” to illuminate the complex histories and realities of “race” as a set of structures and experiences in the United States. It and others like it marked a paradigm shift in our understanding of the ways in which “race” worked as a fundamental fault line in all of our institutions from the legal system, to politics, and to cultural institutions such as education. Leonardo as well employs a personal narrative, one that is compelling and enables him to make a number of crucial interventions into how we think about “race,” about who the “we” is, and about building a theoretical and political apparatus that speaks to the contradictory relations such concepts both cover and uncover.

You will notice that the word “race” is set off in quotation marks in my previous paragraphs. This is important, since race is not a biological entity, but instead is an historically produced and mediated social construct filled with and generated out of structures and identities of exclusion and inclusion. The fact that race is a social construction does not in any way lessen its power. Indeed, it makes it even more powerful since this fact points to the social processes and institutions by which and through which certain groups have consistently been denied person rights while other groups are seen as fully the norm by which all other groups are to be measured. It also points to the fact that this is not a “natural occurrence.” Race is a *relational* concept, defined by its multiple “constitutive outsides.” And what its multiple meanings have been and what they are now are mutable, constituted out of a constantly changing set of relations and identities, that though changing does have consistency and which is both relatively autonomous from and deeply implicated in other relations of exploitation, domination, and subordination and the struggles such relations create (see, for example, Morley and Chin 1996; Apple 2008).

What accounts for the consistency of the power of race and racializing relations in the economy, culture, and politics is the subject of a large body of sociological, historical, and conceptual literature, some of which Zeus Leonardo has both reflected upon and produced in his previous work (e.g., Leonardo 2009). Some analysts, such as Charles Mills, for example, have argued that the very roots of western liberal visions and theories of democracy have required the existence of a constitutive outside, an “other” who is deemed not yet worthy of citizenship and democratic rights (Mills 1997). Other scholars such as Eric Williams (1994) and similar historians of the African (forced) diaspora see the building of modern economies as being fundamentally based on the commodification of Black people. In essence, capitalism

would not exist in its current form without having colonized and brutally enslaved millions of people of color.

One other example may be of interest here. There is recent evidence, for example, that a not insignificant portion of enslaved Africans who were brought to the Americas were Muslim and literate, but in Arabic. What this does to our stereotypes of enslaved Africans and to the idea that the United States was and is a “Christian nation” is more than a little interesting. If those who did a large portion of the labor of actually building the nation in frighteningly exploitative and murderous conditions were Muslim, this means that ultra-conservative rightist positions in education and elsewhere that are committed to restoring a particular reading of Christianity to its supposedly rightful place are based not only on some deeply troubling historical assumptions, but are also based on racist understandings. Criticism of such assumptions is crucial if we are to fully comprehend this nation’s (and many others’) continuing indebtedness to such diasporic people.

Many more examples could be given. But the underlying point behind these and other instances is an insistence that one cannot adequately understand this society, its history, or how it functions today without placing the dynamics of racial exploitation and domination and their accompanying logics and power relations – and what this all means to identifiable groups of people – at the heart of one’s analysis.

This of course is one of the points behind a good deal of the development of a set of tools and perspectives that have proven to be increasingly influential in critical scholarship over the past two to three decades – Critical Race Theory. For CRT, “our” fundamental assumptions, our daily lives, and even an entire range of simple everyday interactions are based on a largely unproblematic common sense of how reality functions. This common sense privileges particular (mis)understandings of the world. Yet, these daily acts are not only “misperceptions.” They constantly produce ways in which White people as a group arrogate to themselves the center and see themselves as racially unmarked. They are the race that is “unraced” (Ladson-Billings 2009; Gillborn 2008; Lipsitz 1998).

CRT provides one of the foundations for Leonardo’s critical reflections, and appropriately so. He is both respectful of what it has accomplished and about its future possibilities. But he wants to extend it, to partly employ its tools to also move the analysis to another level. In the process, his discussion of CRT makes it not “less than” but “more than.”

Leonardo does something else that is of crucial significance. Too often we use the experiences of one minoritized and racialized group as the lenses through which we see every such group. It is to Leonardo’s credit that he expands the discussion considerably. He illuminates the contradictions and complexities of what it means to be “raced”

across multiple diasporic and "othered" communities. His discussions of the political and ideological meanings of these contradictions and complexities and of what they mean in terms of possible identities are among the most thoughtful I have read.

In a recent book, along with Au and Gandin, I have laid out what are the essential tasks in which the critical scholar/activist in education must engage (Apple et al. 2009). Leonardo continues to act in ways that respond to a number of these crucial tasks. When added to and seen in relation to his previous work, Zeus Leonardo's chapter in this book once again documents why I and many others have such respect for him.

Note on Contributor

Michael W. Apple is the John Bascom Professor of Curriculum and Instruction and Educational Policy Studies at the University of Wisconsin-Madison. A former elementary and secondary school teacher and past president of a teachers' union, he has worked with educational systems, governments, universities, and activist and dissident groups throughout the world to democratise educational research, policy and practice. His research centres on the limits and possibilities of critical educational policy and practice in a time of conservative restoration.

References

- Apple MW (2006) *Educating the "right" way: markets, standards, god, and inequality*, 2nd edn. Routledge, New York
- Apple MW (2008) Racisms, power, and contingency. *Race Ethn Educ* 11(3):329–336
- Apple MW, Au W, Gandin LA (eds) (2009) *The Routledge international handbook of critical education*. Routledge, New York
- Austin JL (1975) *How to do things with words*, 2nd edn. Harvard University Press, Cambridge
- Gillborn D (2008) *Racism and education*. Routledge, London
- Ladson-Billings G (2009) Race *still* matters: critical race theory in education. In: Apple MW, Au W, Gandin LA (eds) *The Routledge international handbook of critical education*. Routledge, New York, pp 110–122
- Leonardo Z (2009) *Race, whiteness, and education*. Routledge, New York
- Leonardo Z (2013) *Dialectics of race criticality: studies in racial stratification and education*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 247–257
- Lipsitz G (1998) *The possessive investment in whiteness*. Temple University Press, Philadelphia
- Mills C (1997) *The racial contract*. Cornell University Press, Ithaca
- Morley D, Chin K-H (eds) (1996) *Stuart Hall: critical dialogues in cultural studies*. Routledge, London/New York
- Williams P (1991) *The alchemy of race and rights*. Harvard University Press, Cambridge
- Williams E (1994) *Capitalism and slavery*. University of North Carolina Press, Chapel Hill
- Wittgenstein L (1963) *Philosophical investigations*. Blackwell, Oxford

Susan L. Robertson

Abstract

This chapter offers the reader a conceptual tool for reading education policies, projects and their implementation – Cultural Political Economy of Education. CPE/E is particularly attentive to the explanatory power derived from holding together connections between the cultural, political and economic dimensions of educational life and lives. Using a range of ‘knowledge economy’ projects as a point of entry, and the idea of ‘translation projects’, the chapter also explores the importance of contexts of reception in the education policy domain, and the ways in which contexts of reception make it more or less feasible, or not, to continue to discursively advance, materialize, and institutionalize, particular as solutions to policy.

Keywords

Critical political economy • Education • Discourse • Translation • Power

In those times when the world seems to be at a turning point, when the accustomed framework of life seems to be upset, there arises a demand for new knowledge that will better enable people to understand the changes going on about them. The assumptions upon which prevailing forms of knowledge were based are challenged. A different set of problems have to be confronted.

(Cox and Schechter 2002, p. 76)

Introduction

This chapter’s title, along with the quote from Cox and Schechter above, signals that knowledge will be used in two ways: on the one hand to draw attention to the prioritization of ‘knowledge’ in the new ‘knowledge-based’ economy and society, and on the other hand, to register the call for new knowledges and theories to better illuminate the nature, scope and consequences of emerging social relations in contemporary globalising capitalist social formations and

the role of education in this process. In this chapter I will be suggesting that these two vantage points; ‘knowledge as hegemonic project’ and ‘knowledge as the ‘voice’ of theory’ (Young 2009), are discrete, though connected, moments in the production of a new economy, with education playing a crucial role in this through a series of ‘translation projects’. Briefly, I argue that ‘translation projects’ are political and policy interventions; they mobilize symbolic and other (for example, material, intellectual) resources in an attempt to realize – practically, materially and institutionally – the dominant meta-narrative in specific contexts. Their success or not is mediated by the context of reception.

This chapter responds to the problem of researching the role, significance and consequences of placing ‘the voice of knowledge’ (as opposed to its unvalorised other – knowledge) and the ‘context of reception’ at the heart of contemporary education policy and practices through the systematic use of a particular theoretical and methodological approach – Cultural Political Economy (CPE). Developed by Jessop and colleagues (see Jessop 2004, 2008; Jessop and Sum 2001), CPE is a distinctive “. . . post-disciplinary approach to understanding capitalist social formations” (Jessop 2004, p. 159). In the first part of this chapter I outline the key elements of

S.L. Robertson (✉)
Graduate School of Education, University of Bristol, Bristol, UK
e-mail: s.l.robertson@bristol.ac.uk

this approach with specific attention to the education sector (that is, a Cultural Political Economy of Education approach). The second part of this chapter uses this approach to reveal and explore in detail a number of ‘translation’ projects under way within the education sector; projects which seek to “retain and institutionalize (sediment) some discourses and practices” (Jones 2008, p. 393). The final and concluding section of the chapter reflects upon, and offers some final thoughts on the theoretical and methodological challenges still facing CPE.

A Cultural Political Economy of Education (CPE/E)

In the words of one of its main proponents, CPE is a “...post-disciplinary approach that adopts the ‘cultural turn’ in economic and political enquiry without neglecting the articulation of semiosis with the interconnected materialities of economics and politics within wider social formations” (Jessop 2004, p. 159). In making the broad case for CPE, Jessop argues that:

...this approach is concerned with the key mechanisms that determine the co-evolution of the semiotic and the extra-semiotic aspects of political economy. These mechanisms are mediated through the general features of semiosis as well as the particular forms and institutional dynamics of capitalism.

(Jessop 2004, p. 159)

Two key questions concern Jessop in developing CPE as a research approach. To begin, what role does the semiotic and extra-semiotic play in ordering and transforming capitalist social relations? And, given the contradictions of capitalism, what role does the semiotic play in construing, constructing and stabilizing capitalist social formations?

In order to answer these questions, CPE advances a distinctive set of ontological, epistemological and methodological claims. Ontologically, through semiosis, social objects and subjects are socially-constructed and historically-specific; these social objects and subjects are also ‘embedded’, ‘enacted’ and ‘repaired’ within broader social networks of social relations and institutions as part of wider processes of social reproduction. Epistemologically CPE emphasizes the contextuality and historicity of claims to knowledge whilst at the same time stressing the materiality of social relations and the constraints that operate on agents and therefore the nature of their agency. Methodologically, CPE highlights the role of the cultural and semiotic (the inter-subjective production of meaning) in the continual remaking of social relations and their extra-semiotic properties. In relation to political economy, CPE stresses the contingent and tendential nature of emergent properties. In other words, CPE tries to avoid the reification and essentializing of different moments of capital accumulation, whilst at the same time recognizing the continuing reproduction of the capital relation itself. Importantly, CPE highlights the

role of imaginaries, such as economic imaginaries like the ‘knowledge economy’ and ‘network society’ in representing actually existing practices and relations. Whilst “imaginary economies are discursively constituted and materially reproduced on many sites and scales, in different socio-temporal contexts, and over various spatio-temporal horizons” (Jessop 2004, p. 162), this very process opens up new fracture lines and the limited probability of the smooth reproduction of the social order.

A ‘Cultural Political Economy of Education’ (CPE/E) sees education, not as a pre-given container or universal and unchanging category of social relations and life-worlds, but as a complex terrain and outcome of discursive, material and institutionalized struggles over the role of education in the ‘social contract’. This includes, for instance, the role and status of knowledge within the economy and society; the role of education as a positional good; the relationship between education, the allocation of merit and credentials and social mobility; the conception of the learner; governance of the labouring of teachers and learners; the relationship between education and other social sectors, and so on. In sum, it locates education within a wider ensemble of capitalist and other social relations that directs, albeit in contradictory ways, the form and function of education over time and its role in both social reproduction and in the repair of the social relations of production. It takes the cultural turn seriously by examining the role of semiosis in constituting ‘education’ subjects and objects; for instance as it shapes the ideational, representational and institutional moments in education strategies, structures, subjects and subjectivities.

CPE/E deploys a strategic relational approach to understanding the structured and structuring role of education in political economies more generally (Jessop 2001, p. 5), and the global political economy in particular (Dale 2009). This involves:

(...) examining how a given structure may privilege some actors, some identities, some strategies, some spatial and temporal horizons, some actions over others; and the ways, if any, in which actors (individual and/or collective) take account of this differential privileging through ‘strategic-context’ analysis when choosing a course of action.

(Jessop 2004, p. 162)

CPE/E also argues that education, a key site of cultural production and social reproduction, is directly and indirectly shaped by combinations of economic, political and intellectual forces who manipulate power and knowledge in order to re/produce new boundaries, geometries and temporalities in a spatio-temporal fix to displace or defer capitalism’s crisis tendencies (Jessop 2000). Taken together, CPE/E enables us to unravel and reveal the complex (and contradictory) ways in which discourses/ideas/imaginaries (such as growth, development, knowledge), actors/institutions (such as the World Bank, OECD, nation states) and material

capabilities/power (resources, aid) are mobilized to strategically and selectively advance an imagined, knowledge-based economy and its material re/production, within which education is now being re/constituted in particular ways.

Knowledge, Imaginaries and Master Narratives

According to writers like Gibbons et al. (1994), new ways of thinking about knowledge are transforming the way we work, with whom we work, and the basis of value creation. Such pronouncements have led commentators to ask: have we entered a new era in the organisation of knowledge? If so "...such a transformation would entail more than a shift from one educational ideology to another but a shift in our very conception as to what knowledge is and as to what knowledge is for" (Osborne 2004, p. 430). Similarly, Young, author of the seminal works on knowledge and control in the 1970s, remarked recently: "...'knowledge' has undoubtedly become the major organising category in the educational policies of international organisations and many national governments" (2009, p. 193). Notable too, he observes, is that despite the focus on knowledge, the question – what kind of knowledge, and for whom – is simply not asked.

These observers are right. Whilst 'knowledge' has become the centre piece of almost every national government's strategy for economic development, and despite the fact that all of the major international agencies have embraced the 'knowledge' rhetoric in reports, policies and governance tools, the question of what knowledge is, what and who it is for, and what kind of knowledge, remain under-developed. Knowledge, it would seem, is everywhere and nowhere, making it a particularly challenging object to research. Like globalisation, the ubiquity of knowledge therefore generates important challenges for researchers as to quite what it means, and from there, how best to systematically investigate it as a object of study. The slipperiness of knowledge is tied to the fact that given its 'discursive elasticity', 'absorptive capacity' and 'emptiness', enabling it to function as a powerful meta-narrative, also mean it is elusive and difficult to pin down. For researchers, these difficulties are compounded by the fact that 'knowledge' is typically viewed as a good thing, and if not, then it should be. Added to this, as Stehr observes:

...knowledge has always had a function in social life; one can justifiably speak of an anthropological constant: human action is knowledge based. Social groups and social roles of all types depend on, and are mediated by knowledge. Relations among individuals are based on knowledge of each other. Similarly, power has frequently been based on advantages in knowledge, not only on physical strength. And, last but not least, societal reproduction is not merely physical reproduction but, in the case of humans, always cultural, i.e. the reproduction of knowledge. (1994, p. 8)

Standing outside this maze of conceptual anchorings, commonsense meanings, and normative framings is important if researchers are to see more clearly 'what it is' that the idea of knowledge is being asked to do in contemporary societies, and why this particular idea, in contrast to other discursive possibilities, is such a potent one.

Since the late 1990s, the 'knowledge economy' discourse has dominated talk in political and policy circles. However, as we will see, 'the knowledge-based economy' does not exist *a priori*. In this section I will show, using an historical materialist approach, that 'the knowledge-based economy', like all economies, is socially-constructed.

The idea of a knowledge-based economy has its roots in work developed by a group of 1960s intellectuals, futurologists and information economists, including Fritz Machlup (1962), Peter Drucker (1969), and the well-known Daniel Bell (1973). These writers argued that societies were in transition to becoming 'knowledge-based'. Their thesis, regarded as highly speculative at the time, was later added to by Manuel Castells (1996, 2000). A core argument in this body of work was that information/knowledge is a new factor in production.

The OECD was heavily influenced by these ideas. During the 1970s, the OECD took on board the idea of an 'information society' (Mattelat 2003, p. 113). It also enlisted the expertise of a range of economists concerned with mapping and measuring information. The concept of a knowledge-based economy was added in the 1990s, and reflected the contribution of economists, such as from Dominic Foray (2004) (that it was knowledge and not information that was important, and that economic growth was the result of the distribution and use of knowledge), Bengt-ake Lundvall (1992) (focusing on processes of learning in firms) and new growth theorist Paul Romer (2007) (that economic growth occurs when people take resources and rearrange them in ways that are more valuable).

The OECD then moved to developing sets of indicators to both measure and guide the development of nation states toward a knowledge-based economy. The effect of producing statistics to measure the KBE in turn began to stabilize and materialize the idea of a knowledge-based economy around four pillars which the OECD and other international agencies and national actors were encouraged to agree upon: 'innovation', 'new technologies', 'human capital' and 'enterprise dynamics' (see Robertson 2009, for a fuller explanation). These four pillars were also taken up in the World Bank's Knowledge for Development programme launched in 1996.

At the heart of the OECD's version of the 'knowledge economy' is the idea that knowledge has value. As Bell put it:

Knowledge is that which is objectively known, an intellectual property, attached to a name or group of names and certified by copyright, or some other form of social recognition (e.g. publication). ...It is subject to a judgment by the market, by

administrative or political decisions of superiors, or by the peers as the worth of the result, and as to its claim on social resources, where such claims are made. In this sense, knowledge is part of the social overhead investment of society, it is a coherent statement, presented in a book, article, or even a computer program, written down or recorded at some point for transmission, and subject to some rough count.

(Bell 1973, p. 176)

So, why interest in the idea of a knowledge-based economy? We can begin to make sense of this if we set it against the crisis of capitalism in the early 1970s and the subsequent search for solutions to underpin the next long wave of accumulation. As we have seen already, with the neo-liberal project that drove the restructuring, crises are path breaking and path shaping moments. Crises also require both semiotic and strategic innovation.

However, while through the 1980s and 1990s neo-liberal political theory provided the means to unpick old institutional structures and embed the basic architecture of market liberalism, the subsequent collapse of the Washington Consensus, the leakiness of neo-liberal projects, and the global struggles around the WTO, together resulted in a series of repairs and renovations of that Consensus – Third Way politics, the Post Washington Consensus, and so on.

Strategically, neo-liberalism as an economy imaginary was not adequate to power forward and stabilize a new social formation. This is because the emergence and consolidation of a new economic regime is dependent upon more than changes in the economy: “It also depends critically on institutional innovation intended to reorganize an entire social formation and the exercise of political, intellectual and moral leadership” (Jessop 2004, p. 166). This requires an economic imaginary that has considerable resonance, plausibility, flexibility, and interpretability. It must be one that also:

... enables the rethinking of social, material and spatio-temporal relations among economic and extra-economic activities, institutions, and systems and their encompassing civil society through proposing visions, projects, programmes and policies. And, to be effective, it must, together with associated state projects and hegemonic visions, be capable of translation into a specific set of material, social and spatio-temporal fixes that jointly underpin a relative structures coherence to support continued accumulation.

Through the 1990s, with steerage from dominant nations, regions and agencies, such as the US, EC, WTO, OECD and World Bank, the idea of a ‘knowledge-based economy’ was promoted to eventually emerge as a powerful master economic narrative in many accumulation strategies, state strategies, and hegemonic visions around the world. And, while it corresponds in significant ways to changes in technologies, labor processes, and forms of enterprise, it emerged out of the field of other possible contenders, including ideas like the network society and informational age, and so on.

The idea of ‘knowledge’ is also a particularly potent in this discourse as it is able to articulate with the projects of the Progressive Left as well as the Right. Who can be against knowledge? It also articulates with both human capital and new growth theory, with their interest in the basis of economic growth and competitiveness. However, if we look more closely, the OECD and World Bank’s approach is deeply inflected with western-centered mercantilism (Jessop 2004). This more neo-liberal version of the ‘knowledge-based economy’ seeks to deepen and widen its grasp space by presiding over an extension of intellectual property rights, establishing institutions to ensure that value is returned across borders (Robertson 2009), privileging knowledge creation/venture capital initiatives, and the developing of creative/innovative subjects for capital accumulation.

Translating and Constituting the Knowledge-Based Economy Through Education

Given the central role of education in social reproduction and cultural production, it is hardly surprising that education systems around the globe became the object of considerable scrutiny advanced around the rhetoric of producing ‘knowledge economies’.

As argued above, education systems are important (though not exclusive) sites for the production of knowledgeable subjects. It would be important, therefore, to realize a knowledge-based economy for education to be renovated in ways that would enable this new kind of self/worker/citizen to be constituted. An economy driven by constant innovation would require a rather different kind of self – one which actively produced new knowledge (and potential products and markets) through processes of assembling and reassembling knowledges. However, education systems have also increasingly been viewed as sites for making profits. Until recently, education systems had been protected from the intrusion of capital by discourses of public good, public service and human rights. However, in knowledge-based economies, where knowledge services have ‘value’, then it is also a logical move to bring education into the economy as a services sector in its own right. This requires the state to lose its monopoly hold over of education and enable new players in. These two related moves have opened up education to a range of projects intended to re/construct the sector, its pedagogy, and subjectivities.

Much of this problem specification/agenda setting for the radical reorganization of education has come from the international agencies (OECD, WTO, WB), transnational firms

(e.g. Microsoft, Sylvan Learning Systems), and think-tanks (such as Demos) and foundations (e.g. the Bill and Melinda Gates Foundation).

For researchers, this means being attentive, empirically and methodologically, to the way in which new actors, new spaces, new strategies, new governance mechanisms and new subjectivities are both the subjects and objects of the knowledge economy meta-narrative. In the following section I outline five 'translation projects' that are currently taking place, and which would constitute sites for more extensive investigation.

Modernising Education for the Twenty First Century

Work on the 'future' of schooling and higher education was begun by the OECD with its *Schooling For Tomorrow* programme (2000), higher education scenarios (Lancrin 2004), and recent 'University Futures' programme (2008). The need for such programmes was justified on three grounds: the short-term basis of national policymaking and practice in the face of increasing complexity and change, the fragmented and unscientific nature of education's own knowledge base, and the need to offer national governments disinterested advice (OECD 2009).

In order to focus attention on problems in the contemporary school sector, the OECD proposed the *Schooling for Tomorrow Toolbox* (OECD 2000) aimed at identifying ways of enhancing decision-making at national and sub-national levels. Six scenarios were developed intended to challenge policymakers and practitioners to visualize desirable futures for schooling and how these might be achieved. Education leaders were encouraged to pro-actively influence their wider environment, redesign the way that organizations work, and shape their own country's futures based on national and global trends.

Three pairs of scenarios were developed in the 'toolbox' – all possible responses to the problems of learning for the knowledge economy. These are: maintaining the 'status quo' (schools as outdated bureaucracies), 're-schooling' (reorganizing to prioritize schools as learning organizations), and 'de-schooling' (schools as markets in market network). The overall negative orientation to the 'status quo' scenario as a description of the current organization of schooling was meant to convey the view it cannot offer an adequate vision and orientation to the future. Both re-schooling and de-schooling were then selected as possible ways forward. Both privilege the learner above teachers, and new forms of governance over state monopolies, as the means of realizing knowledge-based economies. The OECD's preferred position tended toward the 're-schooling' scenario, with schools continuing to sit inside a web of state and private sector provision rather than a full-blown market model.

In its first major foray into education policy for secondary schools, the World Bank's (2003) *Lifelong Learning for a Global Knowledge Economy* (directed at developing countries), also tackles the need for the radical transformation of schooling. It reinforced Bell's views outlined earlier, that:

... a knowledge-based economy relies on ideas rather than physical abilities and the application of technology rather than the transformation of raw materials or the exploitation of cheap labor... The global knowledge economy is transforming the demands of the labor market throughout the world.

(World Bank 2003, p. 161)

The Bank then argues that the global knowledge economy

... is also placing new demands on citizens who need new skills and knowledge to be able to function in their day-to-day lives. Equipping people to deal with these demands requires a new model of education and training, a model of lifelong learning.

(World Bank 2003, p. 161)

In the Report the Bank contrasts current education systems (status quo) with a 'lifelong learning' approach. Current systems of education are argued to be teacher dominated, test based, and focused upon rote learning. A lifelong learning model, by contrast, is based on 'doing'; it would be pupil driven and personalized, with individual learning plans. Teachers are viewed as impediments, imposing facts on students. Teachers should be guides and mediators. Space is also made for technologies to become knowledge-based tutors (p. 38). The prioritization of technologies and the Bank's commitment to public-private partnerships creates an entry point for transnational firms to enter into the education sector countries. The imagined school for the future for the World Bank is captured by the de-schooling scenario – with new technologies and the for-profit sector playing a significant role in the provision of learning.

The European Commission (2007a) has also embraced the 'modernizing the school' agenda as a means for realizing its own competitiveness agenda (European Commission 2007b). This is a radical and controversial move given that schools are constitutionally protected by the principle of subsidiarity and therefore part of national state space. Despite political sensitivities, the EC has pressed ahead, and invited Member States to discuss the agenda at its November 2007 Ministerial meeting in Lisbon, Portugal. The EC's working paper for discussion by Member States reflects many of the same issues as the OECD and World Bank reports: the importance of education to develop the stock of human capital (p. 3); the need to modernize the education system to ensure the development of individual creativity; "...the ability to think laterally, transversal skills and adaptability...rather than specific bodies of knowledge" (p. 5). The EC also notes that the persistence of social inequalities limits the success of education policies in ensuring successful learning for 'young Europeans' (p. 9). In all, this tended towards being a less radical intervention in

contrast with the OECD and World Bank. Its focus was on identifying the problems and issues facing Member States in generating a competitive and cohesive Europe. However, in the conclusion, the EC pointed out that "...the institution of the school cannot remain static if it is to serve as a foundation for lifelong learning" (2007a, p. 11). Member States were then invited into proposing solutions that would enable them to modernize their systems. This more tentative solution seeking approach, a consequence of the political reality facing the Commission in advancing its vision, project and strategies at the European scale, also illustrates the politics surrounding the selection of particular imaginaries – in this case, a very different kind of schooling for Member States to realize a knowledge economy.

The 'Scientization' of Teachers' Knowledge

A second strategic project has been the 'knowledge of the teacher'. The concern is not with the wider conditions under which teachers' work but the nature of teachers' knowledge (cf. Robertson 2000). David Hargreaves' arguments have been very influential in OECD circles (Hargreaves 2001; OECD 2005). He has also been very influential in the UK through his stewardship of key government agencies. Hargreaves argues teachers do not possess a body of codified scientific knowledge around teaching and learning. Rather, teachers work in individualized settings and acquire their knowledge through trial and error. Their knowledge is thus personal rather than collective, tacit rather than explicit, and subject/content based rather than process based.

Two problems are identified here (OECD 2001). The first is that teachers do not build up a body of evidence and use that evidence to inform their own practice. The OECD has kept the issue alive by running a series of conferences and workshops exploring how research evidence can be better used by teachers to inform teaching and learning (OECD 2007). It has also created fora for discussions on the kinds of institutions (such as completing reviews of research on areas like ICT and learning) who might synthesise knowledge in ways useful to teachers. However, the tendency has been to generate a simplistic 'what works' – or x causes y approach (supported by evidence from random field trials if possible), rather than a more context sensitive 'what works for whom, under what circumstances, with what outcomes' approach, where complexity and contingency in social settings is taken into account.

The second approach derives from the influential work of Gibbons and colleagues; that content/discipline-based knowledge (Gibbons et al. 1994 call this Mode 1 knowledge) is less important than process and trans-disciplinary knowledge (Mode 2 knowledge) in a knowledge-based economy. Drawing upon these kinds of arguments, the OECD claims

that: "Teachers . . . now need to teach students to learn . . ." and that "...this requires the production and application of new pedagogic knowledge on a huge scale" (OECD 2001, p. 71). They add:

The creation and application of professional knowledge on the scale and in the time-frame demanded by 'schooling for tomorrow' makes demands at the individual and the system levels. At the level of the individual teacher, there needs to be a psychological transition from working and learning alone with a belief that knowledge production belongs to others, to a radically different self-conception which, in conformity with interactive models, sees the production of knowledge with colleagues as a natural part of teachers' professional work. At the system level ways have to be found to bring teachers together in such an activity.

(OECD 2001, p. 71)

While crude forms of the scientization of teachers' work, particularly those around 'evidence-based practice', are viewed by teachers with skepticism and resistance, many teachers have been motivated to work in more collaborative, interactive ways and embraced opportunities that enable this. They have also been keen to take advantage of opportunities offered by governments to develop partnerships with universities to co-produce – though research – knowledge about improving learning. These developments are having a positive affect on teachers' work and suggest that projects of this kind will 'fix' new pedagogical practices.

Personalization and the 'Prosumer'

A third project being advanced is personalized learning. This strategy is a response to the problem of 'learning how to learn' and has been finessed by the OECD, the UK Department for Education and Skills, and UK-based thinktank, Demos. Personalization is a key strategy within the social policy sector more generally (Ferguson 2007) to produce 'active citizenship' (Jenson and Saint-Martin 2006). It challenges current ambitions for reform. That is, the OECD argues that current visions/practices do not have the future (post-industrial) reality in its sights. Personalization sets out to generate a new social architecture and subjectivity through recalibrating the social policy/program/consumption mix. Personalization also replaces words like consumerism in an effort to create an effect of distance between the earlier neo-liberal project and the knowledge economy master narrative, though as we will see they are tightly linked together in this formulation of the economy.

The OECD acknowledges the significant input of the UK government and Demos to its work on personalization. Personalization "...springs from the awareness that 'one-size fits-all' approaches to school knowledge and organization are ill-adapted both to individual's needs and to the knowledge society at large" (OECD 2006, p. 9). Through its focus

on public sector reform, personalization promises to link “...innovation in the public sector to the broader transformations in OECD societies” (OECD 2006, p. 115). Personalization also challenges the teacher-learner relationship, placing the learner at the centre. The teacher is now one amongst an army of specialists; a node in the network and drawn upon when necessary. The OECD report invites a new way of thinking about the learner when it asks:

Imagine a catalogue that consists of items you invent, design and conceive yourself and the supplier was more of an assistant who connects up with you momentarily through a vast, continuously reconfigured network. ... In this post-industrial catalogue, which the ‘producer-consumer’ or prosumer can publish as their personalised version others might want to build on, the crucial ingredient is the value added by the individual themselves. Their capacity to invent, design and then co-produce is what distinguishes this version of personalisation from mass customization.

(OECD 2006, p. 118)

In the UK, journalist Charles Leadbeater’s writing on personalization has been extremely influential. In a pamphlet given government endorsement, Leadbeater argues that it is possible to imagine that:

...users take on some of the role of producers in the actual design and reshaping of the education system. ... The script of a system characterised by personal learning is rather different. It should start from the premise that the learner should be actively, continually engaged in setting their own targets, devising their own learning plans and goals, choosing from a range of different ways to learn.

(Leadbeater 2004, p. 12)

This means breaking open education as the sole system of formal, institutionalized learning and moving toward one that is more fluid, flexible, multi-aged and community based (p. 16), and where teachers have a minor rather than major role.

Personalization articulates with notions of choice, individual responsibility and risk, and the continual renovation of the self (Robertson 2005). It takes the marketization of education a further stage, placing it at the very heart of the pedagogical process (Hartley 2007, p. 630). There is a convergence, then, around the importance of human capital and learning into adulthood as part of an adjustment to the new economy and to promote social inclusion, and to invest in the future (Jenson and Saint-Martin 2006). Personalization is envisaged as having the potential to be a mechanism of governance, a means of constituting the active subject, and co-constituting the competitive knowledge-based economy. It also introduces consumerism to education beyond policies of choice (where consumers made decisions between products). The consumer, in this case the learner, constructs the system, becoming in this moment both consumer and producer – a fluid, self-organizing model resonating with Castell’s (1996) network society, and Bell’s post-industrial futures imaginaries. However, personalization’s success as a

pedagogy for the knowledge-based economy will ultimately lie with whether it is capable of resolving multiple problems within the system of knowledge production – that is, if it is able to increase individual learner performance to ensure international competitiveness; generate sufficient self-discipline in the learner/worker; facilitate inclusion so that it is a bridge to self-responsibility; and, generate creative minds to feed the innovations necessary for an economy centered on value from intellectual property.

The Biologization/Neurologization of the Learner

Brains feature a great deal in the various projects to realize a knowledge-based economy, from strategies to secure the best brains/talent from around the world to work for a firm or nation, to those that focus attention on how to ‘read’ the brain so as to then develop instructional approaches that nurture learning and creativity. Considerable attention is now being given to research on brains – though from the perspective of neuroscience. Its claim is that this kind of approach provides a “hard, scientifically based theoretical framework for educational practices. ... and the basis for a ‘Science of Learning’” (OECD 2007, p. 24).

Since 1999, the OECD’s Centre for Education has run a programme of work on the brain and learning in order to better understand the learning of an individual. The programme was developed over two phases. In phase one (1999–2002), an international group of researchers were brought together to review research findings on the brain and its implications for learning sciences. In phase (2002–2006) three areas were further developed: literacy, numeracy and lifelong learning. In its 2007 publication, *Understanding the Brain: The Birth of a Learning Science*, the OECD claims that through techniques such as ‘neuroimaging’ it is possible to see extensive structural change taking place in the brain. With this kind of data the report claims that, for instance:

Understanding the underlying developmental pathways to mathematics from a brain perspective can help shape the design of teaching strategies. Different instructional methods lead to the creation of neural pathways that vary in effectiveness: drill learning, for instance, develops neural pathways that are less effective than those developed through strategy learning.

(OECD 2007, p. 16)

Understandings generated from this approach to learning, such as the idea of plasticity (that is that development is a constant and universal feature of cerebral activity), is used to legitimize the lifelong learning discourses which feature as sub-narratives in the knowledge-economy master narrative.

However, this area of work has been particularly controversial, in part because of the huge (and often inaccurate) claims that have been made for brain research – in being able

to understand processes learning (Hall 2005, p. 4) and the considerable distance (still) between brain development, neural functioning, and education practices. As Bruer noted: “Neuroscience has discovered a great deal about neurons and synapses, but not nearly enough to guide educational practice” (1997, p. 15).

The Commodification of Education

A fifth project concerns the unbundling and selective capitalization and commodification of the schooling and higher education sectors. This has been underway for some time in selected OECD countries – particularly the USA, UK, New Zealand and Canada. Until recently, processes of capitalization centered on the non-core aspects of education services (Molnar 2006). However, over the past 5 years it is possible to observe an extension and escalation of these activities, contributing in turn to a maturing and expanding education industry (Ball 2002, 2007). Paralleling, though not directly propelling, this development is the World Trade Organization (WTO) and its ongoing negotiations – to progressively liberalize the services sectors and bring them into the global trading regime (Robertson et al. 2002). This project’s narrative is that the governance regime of knowledge-based economies should have a limited number of market-unfriendly policies (Robertson 2009). Not only should state monopolies of public services – like health and education – be dismantled, but it is argued the private sector is uniquely capable of managing change and innovation (Hatcher 2006, p. 599).

More recently, there has been rapid overall growth in the commercialization/privatization of schooling as a result of both explicit government policies shaping the development of the sector, and growing confidence by firms that profits can be made in particular areas of education services. Education as a sector is being unbundled to reveal an array of educational goods and services open to trade to market actors. This includes goods and services in areas such as: (i) delivery – such as provision; (ii) content – such as texts; (iii) infrastructure – such as hardware, buildings; and (iv), services – such as testing. Unbundling is taking place in a number of sectors of the education system: K-12, higher education, and the corporate sector. However, my concern here is with K-12. A number of studies have recently been published to reveal the extent of the capitalisation of education (see Mahony et al. 2004; Hentschke 2007; Ball 2007). Taken together they reveal a myriad of complex interconnections between firms that draw education directly into the global economy.

Education is now regarded as big business. Hentschke (2007, p. 178) reports that in the United States for-profit firms operating in the K-12 segment had an annual growth rate of 6.6 %. The highest growth areas in the U.S. are

currently in K-12 testing and tutoring, while growth in K-12 delivery has been propelled by the continuing expansion of Charter Schools, commercial home-school services, and virtual charter schools (ibid., p. 184). Expansion in the field of testing services also owes a great deal to the testing mandate imposed by the Bush administration – as a result of the effort to drive up standards in education to foster a more competitive U.S. economy.

Final Comments: Back to CPE/E

One of the major difficulties in thinking about the role of knowledge in constituting the new economy is that ‘knowledge’ is made to work at multiple levels and in multiple ways – as sacred and profane; as everywhere and no-where. It describes the ‘well educated’, ‘the wise’, and ‘the everyday’. Indeed, ontologically to develop as a human being – to be human – means to be a knowledging/knowledgeable self. However as I have shown, ‘knowledge’ is also given particular form through its mobilization in the knowledge economy imaginary, as part of political and hegemonic projects.

This knowledge-based economy master narrative is powerful in its capacity to articulate with, and give direction to, projects, strategies, practices and subjectivities that might underpin and realize a new long wave of accumulation. It ties education more closely and completely to the economy though prioritizing, for governing, a certain kind of ‘knowledge’ – as a performance of the self – and its allied subjectivity – the flexible lifelong ‘learner’. However the price of this tie is that a more fundamental transformation of the education sector is required.

The current system of education, with its grammar created out of, and reflecting, education’s role in the production of modernity and capitalism, is problematized in the various translation projects for the knowledge economy, as having now reached its ‘sell-by-date’. The teacher, as the secular bible, must give ground to the learner and a new pedagogy of production. One reading some of the unfolding ‘translation’ projects outlined above – ‘modernization’, ‘personalization’, ‘scientization’, ‘biologization/neurologization’ and ‘commoditization’ – is that they assume a very different role for the teacher, because the learner is involved in a very different set of social spatial relations. The learner now subsumes the teacher.

This new order – a knowledge based economy – requires and constitutes an ontological and epistemic shift in society, and, I have argued, a shift in the kinds of theories that we need to develop in order to understand better what it going on. A Cultural Political Economy of Education (CPE/E) approach draws our attention to the constitutive role of the semiotic in the political economy of education and the role of ‘imaginaries’ in this. Translation of this knowledge

economy imaginary within the education sector is intended to transform that sector. To the extent that these ideas take material and practical form, they are also constitutive of both subjects and objects.

However, what is important for ongoing work using a CPE/E approach to researching the knowledge economy is to undertake further empirical research work on these projects in order to understand the way in which both agents and their agency are shaped, and how in turn that structural strategic terrain of action is in turn constituted as a consequence of this agency. In other words, using these translation projects as a lens, it would be important to examine empirically the different moments of discourse so as to highlight the struggles over ideas and the basis in which some are selected for strategic implementation and which are also further sedimented into and which transform existing arrangements, and others are discarded.

Note on Contributor

Susan L. Robertson is Professor of Sociology of Education, University of Bristol. She is Coordinator of the Centre for Globalisation, Education and Societies, founding co-editor of the journal *Globalisation, Societies and Education*, and founding co-editor of the influential blog *GlobalHigherEd*. She writes on globalization, regionalization, education policy and the state. Susan has extensive experience as a researcher on projects and in working with advanced graduate students.

References

- Ball S (2002) *Class strategies and the education market*. Routledge/Falmer, London
- Ball S (2007) *Education plc: understanding private sector participation in public sector education*. Routledge, London/New York
- Bell D (1973) *The coming of the post-industrial society: a venture in social forecasting*. Penguin, Middlesex
- Bruer J (1997) Education and the brain: a bridge too far. *Educ Res* 26(8):4–16
- Castells M (1996) *The information age: economy, society and culture*, vol 1, *The network society*. Blackwell, Oxford
- Castells M (2000) *The rise of the network society*, 2nd edn. Blackwell, Oxford
- Cox R, Schechter M (2002) *The political economy of a plural world*. Routledge, London
- Dale R (2009) Pedagogy and cultural convergence. In: Daniels H, Lauder H, Porter J (eds) *Educational theories, cultures and learning: a critical perspective*. Routledge, London, pp 27–38
- Drucker P (1969) *The age of discontinuity: guidelines to our changing society*. Heinemann, London
- European Commission (2007a) *Schools for the 21st century*. Commission Staff Working Paper, SEC (2007) 1009. European Commission, Brussels
- European Commission (2007b) *Progress towards the Lisbon objectives in education and training: indicators and benchmarks*. Commission Staff Working Paper, SEC (2007) 1284. European Commission, Brussels
- Ferguson I (2007) Increasing user choice or privatising risk? The antinomies of personalization. *Br J Soc Work* 37(3):387–403
- Foray D (2004) *The economics of knowledge*. The MIT Press, London/Cambridge, MA
- Gibbons M, Limoges C, Nowotny H, Schartzman S, Scott P, Trow M (1994) *The new production of knowledge*. Sage, London
- Hall J (2005) Neuroscience and education: what can brain science contribute to teaching and learning. *Spotlight*, #92, The SCRE Centre, University of Glasgow
- Hargreaves D (2001) Teachers' work. In: OECD (ed) *Knowledge management for learning societies*. OECD, Paris, pp 210–237
- Hartley D (2007) Personalisation: the emerging 'revised' code of education? *Oxford Rev Educ* 33(5):629–642
- Hatcher R (2006) Privatization and sponsorship: the re-agenting of the school system in England. *J Educ Policy* 21(5):599–619
- Hentschke G (2007) Characteristics of growth in the education industry: illustrations from US education business. In: Martens K, Rusconi A, Leuze K (eds) *New arenas of global governance: the impact of international organizations and markets on educational policymaking*. Palgrave, New York, pp 176–194
- Jenson J, Saint-Martin D (2006) Building blocks for a new social architecture: the LEGOTm paradigm for an active society. *Policy Polit* 34(3):429–451
- Jessop B (2000) The state and the contradictions of the knowledge-driven economy. In: Bryce JR, Daniels PW, Henry ND, Pollard J (eds) *Knowledge, space, economy*. Routledge, London, pp 63–78
- Jessop B (2001) *Regulation theory and the crisis capitalism*, vol 1–5. Edward Elgar, Cheltenham
- Jessop B (2004) Critical semiotic analysis and cultural political economy. *Crit Discourse Anal* 1(1):159–174
- Jessop B (2008) *State power*. Polity Press, Cambridge
- Jessop B, Sum NL (2001) Pre-disciplinary and post-disciplinary perspectives in political economy. *New Polit Econ* 6:89–101
- Jones M (2008) Recovering a sense of political economy. *Polit Geogr* 27:377–399
- Lancrin S (2004) Building future scenarios for universities and higher education. An international approach. *Policy Futures in Educ* 2(2):245–263
- Leadbeater C (2004) *Learning about personalization: how can we put the learner at the heart of the education system*. DfES, London
- Lundvall B-Å (1992) *National innovation systems: toward a theory of interactive learning*. Pinter Publishers, London
- Machlup F (1962) *The production and distribution of knowledge*. Princeton University Press, Princeton
- Mahony P, Hextall I, Menter I (2004) Building dams in Jordan, assessing teachers in England: a case study of edu-business. *Globalisation Soc Educ* 2(2):277–296
- Mattelat A (2003) *The information society: an introduction*. Sage, London
- Molnar A (2006) The commercial transformation of public education. *J Educ Policy* 21(5):621–640
- OECD (2000) *Schooling for tomorrow toolbox*. OECD, Paris
- OECD (2001) *Knowledge management for the learning society*. OECD, Paris
- OECD (2005) *Teachers matter: attracting, developing and retaining effective teachers*. OECD, Paris
- OECD (2006) *Personalising education*. OECD, Paris
- OECD (2007) *Understanding the brain: the birth of a learning science*. OECD, Paris
- OECD (2008) *Higher education to 2030*, vol 1, *Demography*. OECD, Paris

- OECD (2009) University futures. http://www.oecd.org/document/18/0,3343,en_2649_35845581_31245522_1_1_1_1,00.html. Last accessed on 17 July 2009
- Osborne T (2004) On mediators: intellectuals and the ideas trade in the knowledge society. *Econ Soc* 33(4):430–447
- Robertson S (2000) A class act: changing teachers' work, the state and globalisation. Falmer/Routledge, London
- Robertson S (2005) Re-imagining and rescripting the future of education: global knowledge economy discourses and the challenge to education systems. *Comp Educ* 41(2):151–170
- Robertson S (2009) 'Producing' knowledge economies: the World Bank, the KAM, education and development. In: Simons M, Olssen M, Peters M (eds) *Re-reading education policies: studying the policy agendas of the 21st century*. Sense Publishers, Dordrecht, pp 251–273
- Robertson S, Bonal X, Dale R (2002) GATS and the education service industry: the politics of scale and global territorialisation. *Comp Educ Rev* 46(4):472–496
- Romer P (2007) Economic growth. In: Henderson D (ed) *The concise encyclopedia of economics*. Liberty Fund, Indianapolis. <http://www.econlib.org/library/Enc/EconomicGrowth.html>
- Stehr N (1994) *Knowledge societies*. Sage, London/New York
- World Bank (2003) *Lifelong learning for the global knowledge economy*. The World Bank, Washington, DC
- Young M (2009) Education, globalisation and the 'voice of knowledge'. *J Educ Work* 22(3):193–204

Jane Kenway

Abstract

This chapter suggests some ways in which the notion of *global assemblage* can be deployed to enhance policy analyses of the knowledge economy and, by inference, other policy discourses. It also makes knowledge an ‘object of inquiry’ identifying some of the key theories of knowledge that have fueled the knowledge economy policy discourse. In so doing it identifies some of the ideas that have led to the global privileging of (1) digitized, codified, quantified, applied and commodified knowledge – particularly techno-science, and (2) national innovation systems. Overall it shows how certain theories have been deployed in the service of hegemonic knowledge systems.

Keywords

Knowledge economy • Policy • Global assemblage • Techno-science • Innovation systems

Susan Robertson (2013) issues a timely call for new conceptual resources and more empirical research to help us better comprehend the ways in which ‘knowledge’ is mobilized, represented and understood in knowledge economy policies as they are manifest in education. She calls for studies that make knowledge ‘the object of study’. And certainly in drawing on and developing, the conceptual resources of Jessop et al.’s Cultural Political Economy (CPE) methodology, she has demonstrated the benefits of post disciplinary policy analysis, which allows us to see how the political, social and cultural aspects of the knowledge economy discourse intertwine across multiple scales.

In response¹ to her call, I offer the concept *global assemblage*, developed by Ong and Collier (2005), because, in my view, it adds to the multi scalar and post disciplinary methodology that she advocates. It resonates with what Robertson

usefully calls ‘translation projects’ and ‘contexts of reception’. And, it also shows, to pick up a further point of Robertson’s, how certain ‘knowledge as the ‘voice’ of theory’ can feed ‘knowledge as hegemonic project’.

The term *global assemblage* describes the ensembles of mixed elements through which global forms flow and to which they are articulated (Ong and Collier 2005; Ong 1999). Studies of global assemblages start with *global forms*. Characteristically, these are abstract, easily mobilized and made mobile and readily rearticulated across diverse spheres of life (e.g. free market ideas). But, Ong and Collier argue, what has to be understood is the manner in which they are rearticulated in the specificities of situations. How this happens, they claim, depends on the infra structures, administrative apparatuses and values-regimes of the situation.

Global assemblage, then, is a composite concept that speaks to the intrinsic tensions in these situated processes of rearticulation. Ong and Collier (2005, p. 16) insist however, that “the space of assemblage is not a locality to which broader forces are counter posed. Nor is it the structural effect of such forces. . . . An assemblage is the product of multiple determinations that are not reducible to a single logic”. These determinants are “heterogeneous, contingent, unstable, partial and situated” (ibid.) A *global variable* can

¹ This paper draws from Kenway, J. Bullen, E. Fahey, J with Robb, S. (2006) *Haunting the Knowledge Economy*, International Library of Sociology, Routledge. I thank Routledge for permission to republish small sections of text.

J. Kenway (✉)
Faculty of Education, Monash University, Melbourne, VIC, Australia
e-mail: jane.kenway@monash.edu

be understood as whatever global form enters the space of assemblage. Studies of global assemblages focus on how the global form in question enters and interacts with other elements in the space of assemblage. The focus is not on how global forms shape situations but on how they interact with diverse elements and actors, and on what evolves. Ong's publications, (1999, 2006) compellingly illustrate the benefits of deploying the notion of global assemblage as a methodology.

In terms of the knowledge economy discourse the notion of *global forms* encourages researchers to identify, not just those aspects of it that are able to move readily across policy sites but also their distinguishing features. This focus has the potential to provide at least some answers to Robertson's question about why some elements get taken up in policy circles around the world and why others fall away.

Take for example, the issue of tacit and codified knowledge. Lundvall (1998) and his co authors (Lundvall and Archibugi 2001; Lundvall 2001; Lundvall and Johnson 1994) identify the sub-groupings herein. Know-what and know-why, can be codified and transferred, traded and quantified as information. Know-who and know-how are tacit (Polanyi 1958, 1966) which means they are complex and variable procedural competencies influenced by experiential and environmental factors. As Lundvall (1998, p. 9) points out, the advent of information technology and the recognition of its economic potentials have favoured codified knowledge. Such favouring of codified knowledge is, in turn, reflected in the focus on the acquisition of ICT skills. But the privileging of codified knowledge over tacit knowledge also has implications for certain parts of the knowledge stock. Scientific and technological knowledge are privileged over social science and humanities knowledge because, on the one hand, they are more amenable to codification, and on the other hand, because their 'codification, standardization and normalization' is seen to increase the rate of innovation and so economic growth.

Focusing on the various *global variables* associated with the knowledge economy discourse encourages researchers to do, as Robertson has done, and trace specific lines of policy mutation across policy agencies, texts and practices. For instance, it invites us to consider if, how, when and why this discourse alters as it moves between such bodies as the OECD, the World Bank, the WTO, UNESCO and the EU. But, as Robertson indicates, analyses cannot be restricted to such bodies for they now 'partner' with and, in fact, experience the tight and bracing embrace of various transnational firms. Such firms must thus be understood as intimately entangled aspects of any global variable. Unravelling these entanglements involves a close consideration of the links between the force and movement of capital with the force and movement of policy ideas. Certainly we can't comprehend how and why certain knowledges become globally hegemonic unless we undertake such inquiry.

In this context it is not difficult to see why 'new growth' theory (Romer 1986, 1990) and its more recent spin offs (e.g. 'new economy') have gained such momentum. According to 'new growth' and other endogenous growth theories, economic growth is driven by technological progress or innovation that involves the inputs of existing knowledge and human capital to make new and improved knowledge 'products'. Technological change is oriented to market imperatives and technology is equated with the knowledge generated through applied or commercial research. Indeed, according to this view, it is 'the context of application' that "describes the total environment in which scientific problems arise, methodologies are developed, outcomes are disseminated and uses are defined" (Nowotny et al. 2003, p. 186).

Endogenous growth theory differs from classical economic theory, which acknowledges the importance of knowledge to economic growth but regards knowledge as exogenous – that is external to – the economic process or growth model (Solow 1970). In endogenous models of macroeconomic growth, knowledge is considered to be internal to the model, and grows as a result of maximizing the behaviour of knowledge workers and knowledge resources.

A further consideration of *global variables* invites such questions as 'Are the same ideas mobilized differently for nation states in the majority world (where most of the world's poor live) as opposed to nation states in the minority world?' Or, are different ideas mobilized and with what justification in both cases?' One might ask, for instance, how did the World Bank justify, express and put into effect the OECD's four pillars; 'innovation', 'new technologies', 'human capital' and 'enterprise dynamics' in its *Knowledge for Development* policies (Robertson)? Such questions allow us to explore the manner in which knowledge, power and geography intersect in the operations of current 'empires of knowledge' (Fahey and Kenway 2010).

Concentration on the *space of assemblage* enables a situated analysis of the rearticulations and, indeed, disarticulations of different facets of the knowledge economy discourse and the positioned particularities that help to bring these about. So, for example, one can explore how the idea of 'national systems of innovation' is inflected differently in different nations and try to explain why and with what effects.

The idea of national systems of innovation was developed by Freeman and others at the Science Policy Research Unit (SPRU), University of Sussex. Such systems are defined as those "networks of institutions in the public and private sectors whose activities and interactions initiate, import, modify, and diffuse new technologies" (Freeman 1987, Freeman and Perez 1988, Freeman and Louçã 2001, Freeman et al. 1982, p. 4). They drew on Schumpeterian evolutionary economics (1939, 1943, 1978), in particular the notion of innovation as a driver of economic growth, to inform their attempts to theorize the dynamics of

technology, growth and trade in the 1980s. Schumpeter's own work on capitalist evolution emphasizes 'innovation as the driving force behind economic, social and institutional change [and] the central role played by capitalist firms in this process' (Fagerberg 2002 p. 4). The principles of this and related neo-Schumpeterian research have significantly influenced the development of innovation policy by supra-national policy organizations and nation states.

Such policies are designed to encourage, among other things, the:

- creation of research 'clusters' and 'centres of excellence' to assist with the generation of new knowledge and critical mass;
- formation of transdisciplinary and transnational networks to ensure access to the best knowledge;
- promotion of collaborative relationships between educational institutions and firms or industry to help spread risk and resources and to assist with the commercialization of research;
- identification of national research priorities;
- provision of incentives to increase enrolment in the so-called 'enabling' sciences (mathematics, physics, and chemistry) to feed the applied sciences;
- innovation and entrepreneurial activities at all levels of knowledge production;
- acquisition of generic 'employer-friendly' skills, including communication skills, learning ability, problem-solving skills, the ability to work in teams, and self-management;
- development of ICT skills and lifelong learning for all.

This innovation policy package is designed and intended to transform education systems; particularly the university sector.

But if we are to respond properly to Robertson's call for empirical research that moves beyond policy abstractions, it becomes necessary to ask which aspects of the package have in fact been rearticulated and disarticulated within a particular *space of assemblage*? In what ways have both intersected with what existed before and with what repercussions? We need to identify which specific determinations, rubrics, actors, representations and human subjects have actually been involved? Our research should be able to specify the new administrative systems and infra structural supports that have been put in place, the theoretical and ethical regimes that have been mobilized and the economic and educational intellectuals who have been drafted to provide both momentum and legitimating authority.

In sum, and in answer to Robertson's insistence that we make knowledge 'the object of inquiry', all the ideas I have mentioned thus far, along with many others (see Kenway et al. 2006) have not simply put knowledge at the centre of economic policies or proclaimed that investment in human capital via education, training and the funding of research

and development is vital to economic growth. They have also contributed to the privileging of particular knowledges; those that can be digitized, codified, quantified, applied and commodified – particularly techno-scientific knowledge. Further, such ideas have contributed to policy perceptions about which knowledge matters, who and what sorts of people and organizations should produce and control it and for what purposes and, ultimately, who most deserves has access to it.

Note on Contributor

Jane Kenway is an Australian Professorial Fellow of the Australian Research Council, a Fellow of the Australian Academy of Social Sciences and Professor of Education at Monash University. Her current ARC research project with an international team is *Elite independent schools in globalising circumstances: a multi-sited global ethnography*. Her recent, jointly produced books are *Globalising the Research Imagination* (Routledge 2008), *Haunting the Knowledge Economy* (Routledge 2006) and *Masculinity Beyond the Metropolis* (Palgrave 2006).

References

- Fagerberg J (2002) A layman's guide to evolutionary economics. Working Papers 17, Centre for Technology, Innovation and Culture, University of Oslo, Oslo
- Fahey J, Kenway J (2010) Thinking in a worldly way: mobility, knowledge, power and geography. *Discourse Stud Cult Polit Educ* 31(5):627–640
- Freeman C (1987) *Technology policy and economic performance: lessons from Japan*. Pinter, London
- Freeman C, Louçã F (2001) *As time goes by: from the industrial revolutions to the information revolution*. Oxford University Press, Oxford
- Freeman C, Perez C (1988) Structural crises of adjustment, business cycles and investment behaviour. In: Dosi G, Freeman C, Nelson R, Silverberg G, Soete L (eds) *Technical change and economic theory*. Pinter, London, pp 38–66
- Freeman C, Clark J, Soete L (1982) *Unemployment and technical innovation: a study of long waves and economic development*. Pinter, London
- Kenway J, Bullen E, Fahey J, Robb S (2006) *Haunting the knowledge economy*. International Library of Sociology, Routledge
- Lundvall BÅ (1998) The learning economy – implications for the knowledge base of health and education systems. Paper presented at high-level seminar on production, mediation and use of knowledge in the education and health sectors, Paris, May 1998
- Lundvall BÅ (2001) Innovation policy in the globalizing learning economy. In: Lundvall BÅ, Archibugi D (eds) *The globalizing learning economy*. Oxford University Press, Oxford, pp 273–292
- Lundvall BÅ, Archibugi D (2001) Introduction: Europe and the learning economy. In: Lundvall BÅ, Archibugi D (eds) *The globalizing learning economy*. Oxford University Press, Oxford, pp 1–17
- Lundvall BÅ, Johnson B (1994) The learning economy. *J Ind Stud* 1(2):23–42

- Nowotny H, Scott P, Gibbons M (2003) 'Mode 2' revisited: the new production of knowledge. *Minerva* 41(3):179–194
- Ong A (1999) *Flexible citizenship: the cultural logics of transnationality*. Duke University Press, Durham
- Ong A (2006) *Neoliberalism as exception: mutations in citizenship and sovereignty*. Duke University Press, Durham
- Ong A, Collier SJ (2005) *Global assemblages: technology, politics and ethics as anthropological problems*. Blackwell, Malden
- Polanyi M (1958) *Personal knowledge*. Routledge & Kegan Paul, London
- Polanyi K (1966) *The tacit dimension*. Routledge & Kegan Paul, London
- Robertson SL (2013) Untangling theories and hegemonic projects in researching education and the knowledge economy. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 267–276
- Romer PM (1986) Increasing returns and long run growth. *J Polit Econ* 94(5):1002–1037
- Romer PM (1990) Endogenous technological change. *J Polit Econ* 98(5):71–102
- Schumpeter JA (1939) *Business cycles: a theoretical, historical, and statistical analysis of the capitalist process*. McGraw-Hill, New York
- Schumpeter JA (1943) *Capitalism, socialism and democracy*. Harper & Brothers, New York
- Schumpeter JA (1978) *The theory of economic development: an inquiry into profits, capital, credit interest, and the business cycle*. Oxford University Press, Oxford, first published 1934
- Solow R (1970) *Growth theory: an exposition*. Clarendon Press, Oxford

Cushla Kapitzke and Stephen Hay

Abstract

Arguing for the importance of understanding the conditions under which certain forms of the social subject become visible and viable, this chapter conceptualises the current educational focus on ‘creativity’ as a technology of governmentality that has arisen from the perceived need for governing authorities to manage and responsabilise populations for the pervasive uncertainties of the global economy. With reference to the document, *Tough Choices or Tough Times*, a publication of the National Center on Education and the Economy in the United States, we show how creativity has been reframed as a programmable capacity of the modern student, citizen and worker primarily because it is considered an indispensable source of enterprise and innovation. Education and family life are an integral part of this bio-politics and the ongoing ‘economisation’ of social life. Our concern is that this reductionist understanding of creativity precludes other transgressive and culturally enriching creativities that represent the infinite range of subjectivities associated with imaginative human capacity and activity. It is vital therefore that educational research renders this historical process transparent and opens spaces for more socially inclusive, sustainable and productive ways of being such as those indicated by the three respondees.

Keywords

Creativity • Subjectivity • Governmentality • Globalisation • Ethics

Creativity: Anatomy of Contemporary Subjectivity

Our capacity for collaborative creativity will become ever more powerful . . . The generations that grow up with these ways of thinking will have as their motto: “We think, therefore we are.” (Leadbeater 2008)

The casual observer of contemporary education policy and research might be forgiven for believing that humanity – at least those inhabiting developed nations – had entered a new

phase of enlightenment. At the heart of this transformation resides a constellation of discourses that celebrate innovation, enterprise and, most recently, creativity as high points of human endeavor. Epochal claims about ‘the end of knowledge’ and a ‘new beginning for science and technology’ (Fuller and Collier 2004) provide a context for reference to a new kind of individual called a ‘creative.’ In public policy and media debates about education, related developments are phrased in terms of lifelong learning, smart knowledge governance, and the need for evidence-based, globally competitive research frameworks. Books such as *Enterprise education: Connecting schools with the creative knowledge economy* (Graham 2005) show the extent to which these themes have pervaded education as this how-to-manual outlines principles for an ‘Entrepreneurial enterprise education’ (title of chapter 3) to develop

C. Kapitzke (✉)
School of Cultural and Language Studies in Education, Queensland
University of Technology, Brisbane, QLD, Australia
e-mail: c.kapitzke@qut.edu.au

S. Hay
School of Education and Professional Studies, Griffith University,
Brisbane, QLD, Australia

‘Creativity-innovation-entrepreneur networks’ (ch. 4) for a ‘New moves, new rules, new [education] game’ (ch. 11).

Our aim, however, is not to lend weight to these breathless claims on the import and virtue of *creativity* as a personal capacity or economic value. Rather, our concern is to examine how creativity has emerged as a master discourse linking activities in domains as diverse as economic and social policy, innovation, research, and public education. Specifically, we focus attention on the question of how and why creativity appeared in education theory and practice at this particular historical juncture, and indicate points of engagement for three respondents around the notion of alternative creativities.

By adopting a critical approach to creativity we seek to destabilize what is presented in both popular and academic literature as an unequivocal good. It is our contention that those who advocate creativity have done so by presenting as self-evident precisely what is in need of explanation. That is, we argue that the contemporary rise of creativity raises more questions than it appears to answer, at least from the viewpoint of social analysis. In order to explore these questions, the singular term ‘creativity’ is used here to refer expressly to the dominant form representing an economized social subject that current policy rhetoric assumes and privileges internationally (Hay and Kapitzke 2009a).

To examine the phenomenon of creativity from a governmentality perspective requires engaging with questions such as the following. What is it about creativity that has led to its emergence at this particular point in history? What specific problems have been identified to which creativity appears to provide resolution, and what is its relationship with related themes such as innovation and enterprise? How do these themes coalesce in education research, policy and practice? What other ways of thinking about creativity are obscured by current assumptions? A useful way of engaging with these questions is to sidestep attempts to ascertain the ‘essence’ or ‘process’ of creativity as such, and to examine how the construct is implicated in constituting modern subjectivities such as those advocated for school students by Clive Graham in *Enterprise Education*.

Creativity as Governmentality

In most current research discourse, the concept *creativity* is framed as an idiosyncratic human attribute or mental trait that is greatly enhanced by technological networks. Gurus of managerialist social enterprise assume, for example, that creativity is a teleological expression of the modern human psyche and free will, one that can and must now be nurtured pedagogically for development of human capital (Checchi 2006; Sidorkin 2007). There are many current models of

and for creativity. Greene (2001), for example, outlines 42 such models. In these literatures, however, creativity variously comprises psychological (Hesselbein and Johnston 2002) or social attributes of digitally networked societies (Leadbeater 2000). This approach to the human subject and the study of it through education research typically assumes a transcendent individualised self that is realized through discourses of personal liberty, choice and productivity (Coyle 1998; Ohmae 2002). By assuming the ‘fact’ of creativity as a preexisting psychological trait, the focus of these approaches is on recognizing, cultivating and exploiting it.

By contrast, taking governmentality as our line of inquiry shifts the emphasis away from questions of how to educate children in order to maximize or nurture ‘creative’ potential. Following Rose and Miller (2008), our interest is in the historical forms that subjectivity takes. The term ‘subjectivity’ refers here to the forms of social being – as distinct from the more individualised identities of the psychological paradigm – that discourse, or accepted practices of language, render possible and adoptable. That is, we examine what conceptions of the social subject come into being at certain times and places, and explore how interventions appropriate to that subject are devised and rendered neutral and natural. Hence, the creative subject is examined here not as a social fact but as a technology of subjectivity.

Our purpose is to explore the aims, methods and techniques that come to bear when individuals evaluate themselves with a view to self-improvement. Rose and Miller highlight the importance of expertise in the discipline of psychology linking the ambitions of those who seek to govern the conduct of individuals with the aspirations of those individuals themselves. This is one possible explanation for why calls by governing authorities exhorting populations to be more creative have appeared at the same time as a wealth of commercial materials for parents and teachers advising them how to raise children (i.e., ‘creative capital’) for ‘creative workforces’ (see McWilliam 2008). That calls for creativity resonate with the deepest desires and ambitions of individuals (e.g., parents, artists, designers) for personal identity and self-development partly explains why neoliberal programs of governance are so effective.

A key strategy through which governing powers operate in this process is via the notion of freedom. Accordingly, we regard contemporary attempts to constitute and govern creativity and the creative subject as a type of regulated freedom encouraging or requiring individuals to compare what they are, what they do, and what they achieve with what they could or should be (Rose and Miller 2008, p. 9). Within this framework, subjectivity is improvised from available social and intellectual resources that are brought to bear on the problem of governing ‘being’. Hence, the key point of the argument is that the creative subject is not a unitary, transcendent entity but is a hybrid subjectivity

which has emerged in the context of the problem of value-adding to human capacity in a highly competitive global knowledge economy.

By conceptualizing creativity as a technology of governmentality, we seek to open a space for imagining other forms of the self and creativity by three respondents. As noted above, the idea of creativity is not new having been applied historically to describe particular kinds of individuals with unusual or rare capabilities (Bröckling 2007). In contrast to this, current concerns with creativity attempt to appropriate its elements with a view to rendering these capabilities programmable. Paradoxically, in this way authorities seek to reframe creativity as a universal subjective capacity: an unremarkable trait of ordinary individuals. To achieve this, the intellectual raw material provided by the psychological construct of creativity has been appropriated and reassembled into governmental programs aimed at constructing individuals as ‘creative’ – and hence economically productive – or not.

From this premise, the following section takes up the question as to why the creative subject has emerged at this point in time. Drawing on contemporary policy evidence, we argue that the focus on creativity is a means of translating problems of social and economic uncertainty associated with globalisation into practical programs of government.

Globalisation as a Problem Space of Government

Creativity has emerged recently from a particular way of imagining a global order in which economic advantage for any nation state is under constant threat from competitors. The combined effects of networked communications technologies, increased international finance capital mobility, and cross-border movement of people means that economic production is no longer contained within the boundaries of nation-states. Moreover, growth in ‘weightless’ forms of production in the knowledge economy has resulted in the deterritorialisation of economic activity. It is now asserted that the diffusion of information technologies has reconfigured production into seamless networks that traverse the borders of national territories unimpeded (Castells 2006). Freidman (2006) has extended the idea of networked relations suggesting that the connectedness of people enabled by new technologies has resulted in a ‘flattening’ of the globe.

For governments, the growth of global networks is regarded as a potential source of social and economic risk. Castells (1996) has pointed out that networks are unstable and uncertain structures. He characterizes these as dynamic and open configurations, comprised of interconnected nodes which have the capacity to expand exponentially connecting

geographically dispersed people and regions. The recent global credit crisis, beginning in 2008, and the consequent downturn in the global economy provide a contemporary illustration of this connectedness. In the case of global value chains, loosening of regulatory regimes and international flows of finance have reduced barriers to the relocation of production facilities by transnational corporations to regions that offer competitive advantages such as cheap labour, low rates of taxation and other financial incentives.

Moreover, as some forms of production in the knowledge economy have become ‘dematerialised’, corporations across a range of industries have increasingly been able to take advantage of educated workforces in emerging economies (Castells 1996; Macdonald 2005). As the U.S. education policy discussion paper, *Tough Choices or Tough Times* noted:

Every day, more and more of the work that people do ends up in a digitized form. From X-rays used for medical diagnostic purposes, to songs, movies, architectural drawings, technical papers, and novels, that work is saved on a hard disk and transmitted instantly over the Internet to someone near or far who makes use of it in an endless variety of ways. Because this is so, employers everywhere have access to a worldwide workforce composed of people who do not have to move to participate in work teams that are truly global.

(National Center on Education and the Economy 2007, pp. 4–5)

As corporations seek competitive advantage in the global market, people and regions participating in global value chains are at risk of being selectively switched ‘on’ or ‘off,’ depending upon the perceived value of their contribution. It is the flexibility and fluidity of networks – and the resulting intensification of competitive pressures – that recently have emerged as the source of much anxiety for policy makers in leading economies.

This anxiety is expressed by the authors of *Tough Choices or Tough Times* in warnings about threats to U.S. dominance in the global economy:

If we continue on our current course, and the number of *nations outpacing us* in the *education race* continues to grow at its current rate, the American standard of living will *steadily fall* relative to those nations, rich and poor, that are *doing a better job*. If the *gap* gets to a certain – but unknowable – point, the world’s investors will conclude that they can get a greater *return on their funds elsewhere*, and it will be almost *impossible to reverse course*. Although it is possible to construct a scenario for improving our standard of living, *the clear and present danger* is that it will *fall for most Americans*. (ibid., p. 8, emphasis added)

Key decision-making nodes within global networks thus emerge as critical sites of power because of their capacity to impact the economic fortunes of nation-states and entire regions. The problem for governments in this emerging global economic regime is that simultaneously they are restricted in their ability to directly influence investment decisions within global value chains but, nevertheless, they

must attempt to manage the social and economic consequences of those decisions.

Pointing to this problem space of the global that U.S. authorities are coming to terms with, subjectivity is a way of rendering governable this ‘unknowable’ problem of government. Here, the novel environment of perpetual uncertainty provides the historical conditions in which relatively uncommon human qualities such as innovation and creativity have become identified as the most valuable attributes of people within national populations. Under such conditions, creativity is alleged to provide a critical competitive edge through its promise of realizing endless cycles of innovation. Creativity signifies the “human potential to bring into being something new . . . to make the absent present . . . to realise the yet inexistent” (Bröckling 2007, p. 99). Furthermore, because creativity offers the promise of economic salvation in a future that is unknowable, this personal quality inevitably increases in value with greater levels of economic uncertainty.

The relationship between the globally competitive environment and the consequent need for authorities to render creativity as a common capacity of the modern citizen worker was stated unequivocally in *Tough Choices or Tough Times*:

In many industries, producing the most important new products and services depends on maintaining the worldwide technological lead, *year in and year out*, in that industry and in the new industries that new technologies generate. But that kind of leadership does not depend on technology alone. It depends on a *deep vein of creativity* that is constantly renewing itself, and on a *myriad of people* who can imagine how people can use things that have never been available before, create ingenious marketing and sales campaigns, write books, build furniture, make movies, and imagine new kinds of software that will capture people’s imagination and become indispensable to millions.

(National Center on Education and the Economy 2007, pp. 5–6, emphasis added)

We see here a representation of economic prosperity rendered as an ever-receding future – ‘year in and year out’ – where the only hope for continued survival hinges on a ‘myriad of people’ committed to eternal cycles of innovation. It speaks of an economic order in which technological innovation in creating new products and services for consumption provides only fleeting advantage. Furthermore, it signals a new ethics for subjectivity which attempts to identify, quantify and programmatise the most rare and esoteric capacities of human beings, and to harness these to the objectives of economic productivity.

As we have argued elsewhere, this new way of conceptualising global space has led to a radical transformation of social subjectivities, whereby the entrepreneurial self of the 1990s is necessarily eclipsed by the creative self.

Unlike the enterprise self who realized her subjectivity *through* the market, *the market is both means and end* of the realization of the creative self (Hay and Kapitzke 2009a).

This conception of creativity highlights the paradox for modern governments in that, while uncertainty and its deleterious consequences must be managed by prudent and responsible government, advocates of the creative economy (for example, Leadbeater) recognize it as an indispensable source of innovation and growth in the knowledge economy. Because of this tension, uncertainty has emerged as a rationality of *governing for the future* within the context of global interdependence (see O’Malley 2004; Zinn and Taylor-Gooby 2006). This regime entails a new form of prudentialism, as individuals are prevailed upon to manage their own prosperity and security into the future through consumption of risk industry products. Such products include ongoing education and training, increasingly compulsory and commercialized insurance schemes, market research, advertising and personal superannuation funds (see Peters 2005, for an educational perspective).

The assumption underpinning this rationality is that the global economy comprises spontaneously emerging networks and self-organising flows now regarded as the predominant mode of social and economic organization. Because these spaces are considered to be naturally occurring and responsive to forces of productivity, it is argued that they are, and should remain, beyond the reach of government, lest the delicate balance of forces – the invisible hand that created them – be impeded, stultified or destroyed. The 2008 global financial crisis highlighted this conspicuous lack of regulatory intervention, illustrating the extent to which this view existed as an unspoken consensus between governing authorities and politically powerful corporations.

We detect here an understanding of global networks that is borrowed and adapted from classical liberalism. This principle likened the domain of the national economy to the state of nature which possessed its own logic and laws, and which, for its wellbeing and efficiency, had to be protected from interfering governments. The situation is analogous to that of seventeenth century Europe when early liberal governments were faced with administering – but not over-governing – the ‘naturally’ occurring social sphere of new *national* economies (Foucault 1979). This historicized conception of global economic space provides at least part of the explanation as to why the creative self – and not some earlier version of the subject such as the ‘innovative’ or ‘entrepreneurial’ self – has emerged as the dominant subject form in contemporary policy accounts.

Creativity: Criterion for (Un)ethical Policy Within a Regime of Economic Terror?

This section provides an interpretation of the ethics of creativity that is different from the innocent one that most policy documents assume. We have shown in other work examining school education policy how neoliberalism functions in large part by ethicalising the social subject (Hay and Kapitzke 2009a). Because the governance of uncertainty requires the administration and self-regulation of each and all within the boundaries of social and political space, public policy is formulated to apply equally to everyone.

As part of that totalising process, creativity has been reconstrued and universalized recently as a singular normative trait to which all must aspire, irrespective of personal circumstance and sensibility in relation to the infinitude of creativities possible through social and cultural variation. Of necessity, creativity has become a focus for research as scientists and educators scramble to define and develop its elements. Greene's (2001) 42 models mentioned above are part of that discursive work as academics and researchers, particularly in the fields of neuroscience and higher education, pursue and constitute the holy grail of creativity as an object of pedagogical analysis and intervention. This creativity imperative is framed invariably in terms of 'social responsibility' as citizens, workers, the differently abled, single mothers and fathers, young people and students alike are obliged to make choices that are seen to comply with its mandates. It is the social context within which the phenomenon of creativity needs to be reconsidered, and explains our aim of shifting the spotlight from the (un)ethics of the surveilled and governed subject to that of governing authorities.

In a study of what he calls the 'bio-economisation' of European higher education, Simons (2006) notes that submission to a 'permanent economic tribunal' condemns the 'entrepreneurial' self to a 'competitive process of lifelong learning' (p. 122). Whilst the emphasis here is on the figure of the 'creative' self which, we argue, has superseded the entrepreneurial self, Simons' philosophical insights are equally applicable. Applying Foucault's concept of 'bio-politics' to the field of higher education in Europe, Simons contends that sovereign power and its 'ancient right to *take* life or *let* live' was replaced at the end of the seventeenth century by a less visible, and hence more insidious, governmental power 'to *foster* life or *disallow* it to the point of death' (p. 138).

Education and family life are an integral part of this bio-politics, which links the minutiae of everyday life of populations to the expansion of productive forces and the

structured differential allocation of resources. Because modern life is predicated on and measured by the social norm of economic productivity, education becomes the necessary mechanism through which students are taught that life itself 'becomes a matter of investment and something to be judged upon using the criteria of economic return' (p. 117). As Simons notes, all of life including time spent with children must demonstrate a productive investment outcome.

Foucault's discussion of the potential slippage of political authority from 'fostering life' to 'letting' or 'making die' is premised on racial distinctions. However, the shift to a criterion of organic capital such as 'enterprise' – in Simons' terms – is not unthinkable. Hence, the questions raised by Simons in regard to social investment and self-investment through learning can be applied just as readily to the construct 'creativity.' These questions of investment deal with the role of learning in what individuals can be or can become. What, then, if one 'chooses' – through 'choice' or otherwise – not to orient one's school or university learning experience to those knowledges that are deemed to pay an investment dividend by generating requisite human capital? And more importantly, what is the ethics of this governmental epistemology that currently underpins political, economic and social life?

That the question is being asked by the authors points to a profound ontological and educational shift whereby education 'clients' are responsible for legitimating their education and, hence, their existence in terms of value-adding through learning. As well, it brings the discussion to the question of the fundamental purpose of education and of publicly funded research for evaluating and informing teaching and learning theory and practice. The issue has preoccupied many philosophers and theorists of education in the past, yet it seems apposite to revisit at this juncture the fundamental question of the intrinsic value of people versus their instrumental value. When education policy conceives learners as a means to an end – that is, as human capital – a discursive framework is established for rationalizing the 'fostering' of human capital through investment as one of 'letting die' through disinvestment. This may seem extreme but such approaches are potentially the thin edge of the philosophical wedge and first step to dehumanization, not of targeted social groups but of all.

Simons refers to the neoliberal policy paradigm as a 'regime of economic terror' (p. 122). This terminology may seem a little graphic but it is clear that those who are unable to harness or demonstrate the requisite creative capacity through strategic 'choice' and effective decision making will be excluded or 'switched off' from circuits of production and consumption (see Hay and Kapitzke 2009b). The work of O'Malley (2005), for example, has shown how the costs of risk have been privatized through the

abandonment of public policy attention to social rights and ‘collectivization’ of risk. Like Simons’ analysis, O’Malley’s claims are unsettling because they show how these governmental technologies are used by authorities to divide, isolate, and let die certain social groups just as easily as they may provide social security and equity for those excluded from networks of the global economy.

Implications for Education Research

Conceptualising creativity in governmental terms reveals the conditions under which certain forms of the subject become viable and valuable. The approach illustrates for educational researchers that categories of the social subject cannot be assumed as pre-determined and that the manner of their constitution needs to be problematised as part of the research process. Concepts of governmentality, therefore, enable researchers to open critical spaces for examining *technologies of subjectivity production*, framing what people can and should be in the light of authoritative expectation and direction through policy and practice.

In order to understand contemporary notions of the self contained in schematics such as enterprise and creativity, the cultural practices through which those selves are constituted as historical contingencies need to be identified and explicated. Such analyses would elucidate how themes such as ‘creative classes’ have potential to produce their own forms of social exclusion through the very categories they constitute. Furthermore, if particular forms of self appear as solutions to mundane problems of government, one of the key purposes for educational research must be *to unknow the everyday, taken-for-granted categories* such as *creativity that define the self*. Research projects should therefore include examination of the conditions under which we are governed, to what end, and at what cost. It should also open spaces for other ways of imagining human forms of the self through diversity within dominant discursive formations: for example, a multiplicity of creativities.

Leadbeater’s restatement of Descartes’ celebrated observation quoted at the beginning of the chapter is significant because it shows how subjectivity within the creative paradigm derives its meaning from economic discourses that gave birth to it. These discourses infuse Descartes’ original proposition with different meanings from those that were possible during his time. Leadbeater’s act of revisiting and revisioning this classical statement on human ontology is noteworthy because it speaks of an aspiration for a new generation of social subjects who are equipped with personal and intellectual capacities demanded by the present age. The statement is therefore representative of those who perceive economic salvation in and through a new form of subject, namely, the isolated, socially independent and endlessly self-creating individual.

We conclude by pointing to what this theorisation of the contemporary subject might mean for education researchers working from diverse social backgrounds and cultural epistemologies. A significant issue for researchers is to examine the implications of this position for social groups whose subjectivities are formed through ontologies other than the competitive, performative self of advanced liberal democracies. Examples here may include research paradigms founded on indigenist ontologies (see Martin 2008). One direction for research suggested by this theorisation is how such subjectivities are negotiated and reside in the contradictory spaces characterised by conflicting social and economic imperatives. In closing, we note that this ontological imperative is not particular to those inhabiting marginalised or indigenous social spaces but rather is a characteristic of the complex human condition constituted as it is today predominantly by economic imperatives. Our concern is that this current understanding of creativity precludes other transgressive and culturally enriching creativities that represent the infinite range of subjectivities associated with imaginative human capacity and activity.

Notes on Contributor

Cushla Kapitzke is Associate Professor at the School of Cultural and Language Studies in Education, Griffith University, Australia. Her current research interest is educational governance in relation to the shrinking domains of public knowledge and public education within economies driven by global capital. Her most recent book is *Global Knowledge Cultures* (2006) which is co-edited with Michael A. Peters (UIUC).

Stephen Hay teaches in the School of Education and Professional studies at Griffith University, Queensland, Australia. His research focus broadly adopts a governmentality framework to investigate education policy, school governance and globalisation.

References

- Bröckling U (2007) On creativity: a brainstorming session. In: Masschelein J, Maarten S, Brockling U, Pongratz L (eds) *The learning society from the perspective of governmentality*. Blackwell, Oxford, pp 99–107
- Castells M (1996) *The rise of the network society*. Blackwell, Cambridge
- Castells M (2006) *The network society: from knowledge to policy*. In: Castells M, Cardoso G (eds) *The network society: from knowledge to policy*. Johns Hopkins Center for Transatlantic Relations, Washington, DC, pp 3–22
- Cecchi D (2006) *The economics of education: human capital, family background and inequality*. From http://gateway.library.qut.edu.au/login?url=http://www.qut.eblib.com.au/EBLWeb/patron?target=patron&extendedid=P_255136_0. Retrieved 10 July 2008
- Coyle D (1998) *The weightless world: strategies for managing the digital economy*. MIT Press, Cambridge, MA

- Foucault M (1979) *Discipline and punish: the birth of the prison*. Penguin, Harmondsworth
- Friedman T (2006) *The world is flat: a brief history of the twenty-first century*. Penguin, New York
- Fuller S, Collier JH (2004) *Philosophy, rhetoric, and the end of knowledge: a new beginning for science and technology studies*, 2nd edn. Lawrence Erlbaum, Mahwah
- Graham C (2005) *Enterprise education: connecting schools with the creative knowledge economy*. Pearson SprintPrint, Frenchs Forest
- Greene RT (2001) A model of 42 models of creativity. From <http://www.scribd.com/doc/2149673/A-Model-of-42-Models-of-Creativity-by-Richard-Tabor-Greene-20june06-PDF-for-Global-Distribution-FINAL>. Retrieved 22 July 2008
- Hay S, Kapitzke C (2009a) 'Smart' state for a knowledge economy: reconstituting creativity through student subjectivity. *Brit J Sociol Educ* 30(2):151–164
- Hay S, Kapitzke C (2009b) Industry school partnerships: reconstituting spaces of global governance. *Global Soc Educ* 7(2):203–216
- Hesselbein F, Johnston R (2002) *On creativity, innovation, and renewal: a leader to leader guide*. Jossey-Bass, San Francisco
- Leadbeater C (2000) *The weightless society: living in the new economy bubble*. Texere, New York
- Leadbeater C (2008) *We-think: the power of mass creativity*. Profile, London
- Macdonald G (2005) Schools for a knowledge economy. *Policy Futures Educ* 3(1):38–49
- Martin KL (2008) *Please knock before you enter: aboriginal regulation of outsiders and the implications for researchers*. Post Pressed, Teneriffe
- McWilliam E (2008) *The creative workforce: how to launch young people into high-flying futures*. UNSW Press, Sydney
- National Center on Education and the Economy (2007) *Tough choices or tough times: the report of the new commission on the skills of the American workforce*. Jossey-Bass, San Francisco
- O'Malley P (2004) *Risk, uncertainty and government*. Cavendish Press, London
- O'Malley P (ed) (2005) *Governing risks*. Ashgate, Aldershot
- Ohmae K (2002) *The borderless world: power and strategy in the interlinked economy*. Profile Books, London
- Peters MA (ed) (2005) *Education, globalization, and the state in the age of terrorism*. Paradigm Publishers, Boulder
- Rose N, Miller P (2008) *Governing the present: administering economic, social and personal life*. Polity, Cambridge
- Sidorkin AM (2007) Human capital and the labor of learning: a case of mistaken identity. *Educ Theor* 57(2):159–171
- Simons M (2006) Learning as investment: notes on governmentality and biopolitics. In: Masschelein J, Simons M, Bröckling U, Pongratz L (eds) *The learning society from the perspective of governmentality*. Blackwell, Malden, pp 109–126
- Zinn J, Taylor-Gooby P (2006) The challenge of (how to manage) new risks and uncertainties. In: Taylor-Gooby P, Zinn J (eds) *Risk in social science*. Oxford University Press, Oxford, pp 54–75

Phil Graham

Abstract

True creativity sits in stark contrast with global trends to standardise education systems. It is, though, an attractive semantic and conjures up all sorts of positives. However none of the positive potentials of the creativity push are likely to materialise while process-oriented bureaucratic understandings of creativity dominate curriculum policy and development. Creativity requires pedagogy to forego substantial levels of control. It also requires ethical content because “creative” is an empty epithet, applying equally to the creation of beautiful music as it does to the creation of a nuclear weapon. In responding to Kapitzke and Hay, this chapter outlines the stark contradictions embedded in the creativity push.

Keywords

Creativity • Bologna • Creative pedagogies • Curriculum • Bureaucracy

Critical Creativity: Beyond Purr Words

The critical issue in response to the recent creativity push in education policy is not, I think, its governmentality aspect. The function of large policy making bureaucracies *is* to govern. To find that their policy thrust *du jour* (whether literacy, national values, creativity, productivity, efficiency, or whatever) has become a key term in the disciplining of subjects is not very edifying on the critical aspects of policy. Nor can it get to the heart of what may be amiss in the current policy trends towards the promotion of creativity as a pedagogical priority.

Contemporary policy moves in a world closely allied to Public Relations (PR). The communication – the literal *selling* – of policy has become at least as important as its societal effects, if not more so (Miller 2002). As a consequence, policy moves in waves of upbeat semantics, pausing only to hose down the latest crisis in a flurry of spin and promises of reform at whichever level might make best sense

to a jaded and confused populace. “Creativity” is what Hayakawa (1941/1991) would call a ‘purr word’. It has unerringly positive connotations. Who could possibly be against it? It draws on connotations of the Arts; is readily associated with innovation; and positively drips with beauty, contemplation, and individual expression. Who would not want these aspects of our human being insinuated into every crack and corner of our education system? Therefore creativity is a semantic well suited to hosing down or glossing over the facts of a system that is broken and said to be struggling for relevance in almost every industrialised nation.

Far from being an unambiguously sincere policy direction, the push for creativity can be seen as a PR ameliorative against the increased standardisation and mechanisation of education. Despite the proliferation of discourses on the virtues of creativity, the overwhelming trend is towards standardised curriculum and standardised testing across national legislatures and beyond. The Bologna process continues apace, its aim being the standardisation and global portability of higher education degrees. The Australian government is committed to a standardised national curriculum and nationally standardised testing throughout the schooling experience. The US ‘no child left behind’, based on standardised testing and fonnix-based [*sic*] literacy has been a widely acknowledge

P. Graham (✉)
QUT’s Institute for Creative Industries and Innovation, Queensland
University of Technology, Brisbane, QLD, Australia
e-mail: p.graham@qut.edu.au

failure (see Peterson and West 2003). Industrialised education based on what Callahan (1962) calls ‘the cult of efficiency’ is on the march, with all its industrial hallmarks: uniformity, standardisation, replicability, and universality.

These two contradictory discourses – creativity and uniformity – are confounded at every stage in policy, seemingly without comment or criticism. Take for instance the recent paper from Scotland’s education bureaucracy (Scottish Executive Education Department [SEED] 2006):

Wales, like England and Northern Ireland, has a statutory National Curriculum. Creative skills are one of the seven common requirements in the Welsh National Curriculum. (p. 8)

As one might expect from a strategy grounded in industrial principles, played out within an utterly marketised world, the “rules” of creativity and its formerly fuzzy boundaries are to be officially delimited within the strictures and structures of national bureaucracies. Discussing the *Creativity Counts* program, SEED notes the following:

The main findings were that developing creativity in education produced benefits in terms of pupil motivation, enthusiasm and enjoyment. The pupils became more independent in their learning: “rather than being told; they became more resourceful and reflective. They became good at knowing what worked for them and what did not” (p. 5). However, this freedom to experiment took place within a supporting structure of *high expectations and clear outcomes*: “They knew what they were expected to achieve and how to go about that”. (p. 9, emphasis in original)

An allegedly creative process with fixed outcomes is *not* creative. In fact, what we see here – and throughout much of the creativity in education discourse – is an experiment in production processes rather than any “creative revolution”. Learning (or teaching one’s self) to achieve an externally determined set of outcomes by doing things differently is in many senses “outsourcing” answers to the question: how can we better achieve what we already do? There are no questions about *what* gets taught or *why*, there is only the entirely technical question of how best to achieve creative teaching and learning. The report is explicit about this in its findings, and teachers apparently agree ‘There should be less emphasis on what is being taught and more on how’ (p. 10). This ‘producer’ (Bruns 2008) technicisation of teaching process is not in itself a bad thing, but it is far from being creative in any way. It is in fact merely another exercise in efficiency – a “user-generated” set of answers to questions of pedagogic process. Questions of *what* and *why* we teach what we do are important questions to be answered. The turn towards creativity – once it is meshed with standardised national curricula – is merely another turn towards technique couched in PR strategy. The critical questions about educational outcomes, the value of systemic diversity, and truly creative outcomes are not surprisingly obfuscated or obviated in any bureaucratised version of creativity. This is bound to be the case as “best practice” and a bureaucratic drive to “identify

and agree on the range of skills that should be acquired” in creative education become policy realities (SEED 2006, p. 8).

Why *What* and *Why* Are More Important than *How*

Despite its generally positive connotations, “creativity” is what Barthes (1984) calls an “empty signifier”. It is value neutral and without moral or ideational content. One can be described as creative in the development of new weapons as in the development of new music. Reporting on observations that female chimpanzees make weapons to kill bush babies (another primate), Professor Jill Pruetz says “It’s a way of accessing protein or meat that is a creative solution to this problem” (Pruetz 2007 in Syeed 2007). Similarly, Westrum’s (1999) historical account of the Sidewinder missile’s development comes with the following publicity:

The result of twelve years of research, including hundreds of interviews, Westrum’s study examines this unique military-civilian cult of creativity. McLean and his China Lake team produced an amazing array of technological and engineering marvels. Their powerful insights were coupled with outrageous creativity. (Amazon 2009)

Music Theatre Australia makes the following militaristic boast about its services to the corporate world:

‘Killer Innovation - Let us help you think differently (and more effectively) using some of the most effective and rewarding creative thinking techniques from around the world.’ (MTA 2009, emphasis in original)

In fact, and almost entirely without critical comment, ‘creative education and training’ strategies are flourishing in the corporate sector, as evidenced by the proliferation of ‘creative leadership’ discourse in the most prestigious of Business Schools and influential Corporate boardrooms (see Wharton Business School 2005).

From a critical perspective, how things are achieved matters to the degree that the finest aims can be undermined by careless means. More important, given the radically changed conditions in which we currently find ourselves, are the suite of objectives aimed at by critical scholarship – literally the *what* of critical endeavour; its historical content so to speak. Vague aims of “equality”, “social ownership of the means of production”, “equity”, and the like have become somewhat redundant through discursive wear, historical distortion, and surprising turns in the fate of what continues to be called Capitalism. Positive and moral solutions to poverty, disease, violence, hunger, homelessness, and other systemically produced miseries seem further away than ever: the latest financial crisis – the deepest in decades – is happening amidst a global rise in religious fundamentalisms of all kinds: Christianity, Islam, Hinduism, and even Buddhism have all developed significant and violent crusading elements

(Storzer 2004). The environment of the entire planet – life *tout court* – is in peril. Thirty years of rabid marketisation has fostered generations of people in whom the antisocial motives of self-interest and greed have been encouraged to flourish at every level, in imagination and in practice. Meanwhile, all forms of socialism have allegedly been consigned to the dustbin of history based on the fall of an oppressive form of government that was called communism but was in fact merely another twentieth century totalitarian dictatorship (Bullock 1991). Consequently there is a crisis of imagination where the future of politics, economics, justice, culture, religion, and almost everything fundamental to human culture is concerned – the *what* of critical pedagogy and scholarship has become more important than ever.

Critical Crisis for Creative Pedagogues

The lack of imagination about alternative and more humane futures is to me the most fundamental question to be addressed by critical scholarship and pedagogy. Creativity and imagination have clear and positive roles to play here. The act of imagining and bringing into being what will be the human world for generations to come is the most challenging and important role for human creativity. Imagining and making the next new weapon, the next successful corporate sales strategy, or the next suite of consumer goods will do nothing good for the future of humanity given the enormity of the combined crises in which we find ourselves. We need both to reimagine and remake ourselves, ideationally, ethically, and practically. Creating new political economies, new modes of citizenship, new cultures, and new bases of association are essential to the future of humanity. Such saving graces are unlikely to come from the current ranks of elite society. There is simply too much for the financial and political elite to lose. Creative solutions are the mammoth task of public education and require true creativity, broad license, a diversity of ideas, and deep respect for cultural differences, none of which can come from the standardised model being pushed throughout developed nations.

These are the deep critical flaws in current “creativity” discourses: first, they obscure the mindless standardisation going on in education; second, they place creativity at the service of tired and failed models of political economy, and; finally, as a function of those first two flaws, they obviate any alternative futures by routinising creative practice and monopolising its goals on behalf of established interests. The job of imagining new ways of organising ourselves that are sustainable, equitable, just, and morally good is one that will probably first be realised in the arts. Two hundred and sixty nine years of feudal decline marks the historical distance between the first modern conception of socialism by Thomas More (1563/2003) and the earliest programmatic attempts at industrial socialism in New Lanark (1785). The

democratising force of Capitalism (which cannot be denied, however partially it has been realised) gave way to a pernicious form of corporatism which has promoted the worst features of capitalism, feudalism, and mercantilism while mitigating against the most positive aspects of modernity (Graham and Luke 2003, 2005), most of which were articulated before the dawn of the nineteenth century and then abandoned as systematic political ends well before the end of the eighteenth century (Nace 2005). It may well be that our best possible future already exists somewhere in print or on celluloid. If so, it will take true creativity to recognise and articulate such a story.

We are at a critical point in history. The discourse of creativity in policy should, I suggest, be embraced as a critical opportunity for pedagogy. But critical theory and practice are hampered by their own unfortunate history of critique for its own sake (*art pour l'art?*), conducted entirely within its own arcane terms (*why is critical theory so hard to read?*). One is either a Marxist or a Foucauldian or a Deleuzian; a Poststructuralist, a Postmodernist, or Neomarxist – or something. The pressure to fly a specific theoretical “flag” is increased by disciplinary boundary riding that reeks of dilettante careerism. At a practical level, the disappointments of 1968 still haunt the critical sphere, with Labour movements in Britain and Australia dumping the most basic tenets of equality and political economic revolution. Creativity and imagination – when turned to positive ends – are probably the most beautiful and powerful aspects of human being and we should do all we can as critical pedagogues and researchers to direct the discourse towards the imagination and realisation of a better world.

Note on Contributor

Phil Graham is Professor of Communication and Culture at Queensland University of Technology and Director of QUT's Institute for Creative Industries and Innovation. He has published widely on political economy of communication, critical discourse analysis, and new media. He has been a professional musician for over 30 years, is executive editor of *Critical Discourse Studies* (Taylor & Francis), and author of *Hypercapitalism: Language, new media and social perceptions of value* (Lang).

References

- Amazon (2009) Product description ('sidewinder'). Available online at <http://www.amazon.com/Sidewinder-Creative-Missile-Development-China/dp/1557509514>. Accessed 3 Mar 2009
- Barthes R (1984) *Mythologies* (trans: Lavers A). Hill and Wang, New York
- Bruns A (2008) *Blogs, wikipedia, second life, and beyond: from production to produsage*. Peter Lang, New York
- Bullock A (1991) *Hitler and Stalin: parallel lives*. Harper Collins, London

- Callahan RE (1962) *Education and the cult of efficiency*. University of Chicago Press, Chicago
- Graham P, Luke A (2003) Militarising the body politic: new media as weapons of mass instruction. *Body Soc* 9(4):149–168
- Graham P, Luke A (2005) The language of neofeudal corporatism and the war on Iraq. *J Lang Polit* 4(1)
- Hayakawa SI (1941/1991) *Language in thought and action*, 5th edn. London, Mariner
- Music Theatre Australia (MTA) (2009) MTA newsletter, vol 7. Promotional email received 4 Mar 2009. Also available at <http://www.musictheatreaustralia.com.au/>
- Miller MC (2002) *The Bush Dyslexicon: observations on a national disorder*. Norton, New York
- More T (1563/2003) *Utopia* (trans: Turner P). Penguin, New York
- Nace T (2005) *Gangs of America: the rise of corporate power and the disabling of democracy*. Berrett-Koehler, San Francisco
- Peterson PE, West M (eds) (2003) *No child left behind? The politics and practice of school accountability*. Brookings Institution Press, Washington
- Scottish Executive Education Department [SEED] (2006) *Promoting creativity in education: overview of key national policy developments across the UK*. Available online at <http://dera.ioe.ac.uk/7329/>. Accessed 27 Feb 2009
- Storzer RP (2004) Rise of buddhist-extremism in Sri Lanka. *The Asian Tribune*. Available online at http://www.asiantribune.com/oldsite/show_news.php?id=11203. Accessed 2 Mar 2009
- Syeed N (2007) Chimps using spears to hunt bushbabies. *The Washington Post*. Available online at <http://www.washingtonpost.com/wp-dyn/content/article/2007/02/22/AR2007022202218.html>. Accessed 2 Mar 2009
- Westrum R (1999) *Sidewinder: creative missile development at China Lake*. Naval Institute Press, Washington
- Wharton Business School (2005) Five takes on creative leadership. Available online at http://knowledge.wharton.upenn.edu/special_section.cfm?specialID=31. Accessed 2 Mar 2009

The More Things Change, the More They Stay the Same: Creativity as the Next Colonial Turn

39

Karen L. Martin

Abstract

The emergence of creativity as a master discourse variously promises benefits, threatens loss, and for some, holds no change. In response to Hay and Kapitzke, this response piece argues that what is promised as new in a discourse of creativity is actually a perpetuation of imperialism and colonialism as experienced by Aboriginal peoples. Drawing on the example of the discourses of ecological and sustainable development, I examine how the underlying paradigms and knowledge regimes remain unchallenged and therefore, unchanged, and thus serve to re-inscribe the erasure, exclusion and silencing of Aboriginal peoples. The discourse of creativity serves not as a vehicle of social, political, economic and educational transformation but of re-invention of previous master discourses. Thus the caution: that as things change creatively, the more they creatively stay the same?

Keywords

Master discourse • Colonialism • Aboriginal knowledge • Sovereignty • Contradictory spaces

Introduction

The emergence of creativity as a master discourse holds numerous implications for those who have much to benefit, those who have much to lose, and those who will continue to neither benefit nor lose, namely Aboriginal peoples. These master discourses are not new but are core to imperialism and colonisation, serving as mechanisms of domination, exclusion and erasure (Tuhiwai Smith 1999). Such discourses have historical patterns in the invasion, colonisation and control of Aboriginal lands and lives and are made manifest in economic policy, research, social policy and education. It is the intention of this response to outline how this emergence of creativity as a discourse, whilst new as a project of colonialism, is not new in its aims and outcomes for Aboriginal peoples. As a discourse, it can either perpetuate existing

paradigms and knowledge regimes, or it can create spaces for conceptual, physical, economic, political, educational and social transformation. These transformative spaces are therefore not emergent but transitional, and seek to facilitate the participation of Aboriginal peoples, not by necessity or conformity or regulated freedom, but through negotiated engagement.

Colonialism by Any Other Name (or Project) Is Still Colonialism

Colonialism is domination through expansion and its subsequent projects of invasion, conquest, extermination, exploitation and subjugation (Moreton-Robinson 2001; Tuhiwai Smith 1999). These are far from new experiences for Aboriginal, First Nations, Indigenous peoples throughout the world. Colonialism is amongst the first forms of globalisation achieved through the use of technologies, informed by knowledge regarded as creative for its time. This knowledge and its technologies are derived from the

K.L. Martin (✉)
School of Education, Southern Cross University,
Lismore, NSW, Australia
e-mail: karen.martin@scu.edu.au

same ontology that elevated and separated 'man' from 'nature' and 'human' from 'humanity'. These historical contingencies show the entrenched, self-serving and self-perpetuating obsessions inherent in all forms of colonialism and how these persist across space and time. For example, where present debates and dialogues turn to creativity and the creative subject regarding knowledge, in a previous debate it was innovations regarding ecological development, sustainable biodiversity and Aboriginal knowledge (Hill and Smyth 1999).

In the decade of 1990–2000, the awareness of the depletion of natural resources and the preservation of pristine environments saw the emergence of the discourse of biodiversity, through somewhat contradictory projects of ecological management and sustainable development. This protection of the economy and preservation of the ecology was imagined through a reconceptualisation of the problem of natural resource management wherein governments and nation states declared commitment to the United Nations Convention on Biological Diversity. Thus, Aboriginal knowledge systems were identified as an untapped and under-utilised repository of knowledge to provide potential solutions to the world's environmental problems (Posey and Dutfield 1996). The argument was that to protect and preserve the former, it was necessary to protect and preserve the latter. This necessitated a shift in the thinking about research, intellectual property rights, cultural rights and freedoms (Davis 2005). After centuries of erasing and silencing Aboriginal people and exploiting their lands, Aboriginal knowledges were seen as a means by which to solve environmental problems of some nations, and perhaps of the world. Until this time, value was only given to artefacts of Aboriginal knowledges such as dance, technology and particularly visual art, being viewed as an economic resource for non-Aboriginal commercial and tourism ventures, further adding to Aboriginal exploitation (Chalmers 2007).

Hence Aboriginal epistemology was not valued in its own right, but only for solving issues caused by non-Aboriginal consumption and abuse of land, waterways and other natural resources, otherwise called economic development (Escobar 1996; Smith 2000). What appeared then to be a shift in the discourse of development turned out to be the reconversion of nature as biodiversity, still controllable and consumable. It was at this precarious juncture, Aboriginal knowledges risked further exploitation, subjugation or erasure. Aboriginal people risked, yet again, the separation from, distortion and commodification of their worlds for the benefit of coloniser nation states, and again with no real economic, political or social gain. This became evident in the dichotomous relationship of power determined by Western knowledge systems towards Aboriginal knowledge systems in which the former dominated and maintained control of the numerous debates and discussions.

The discord between Aboriginal and Eurocentric worldviews is dramatic. It is a conflict between natural and artificial contexts. Aboriginal worldviews are not reductionistic. They always stress similarities rather than differences . . . The worldview is a unified vision rather than an individual idea.

(Youngblood Henderson 2002, pp. 261–262)

In some debates ontology was erased as though knowledge systems are value free, culture free, and objective. In all debates, Aboriginal knowledge systems were scrutinised, essentialised, locked in time and place and over-simplified to the self-serving and self-perpetuating nature of these discourses. The recognition of Aboriginal knowledges as a means to solve non-Aboriginal environmental problems turned out to be a project of capitalism (Escobar 1996; Peet and Watts 1996) because, in order to protect Aboriginal knowledges, these had to be recorded, codified and appraised.

The production of knowledge, new knowledge and transformed 'old' knowledge, ideas about nature of knowledge and the validity of specific forms of knowledge, became as much commodities of colonial exploitation as other natural resources (Tuhiwai Smith 1999, p. 59).

Aboriginal knowledge is a way of life derived from an ontology that has sustained Aboriginal peoples for eons. Our Ways of Knowing (Martin 2008) are more than information or facts and are taught and learned in certain contexts, in certain ways. They are purposeful only to the extent to which they can be used. For instance, watching or observing is not a passive activity but the strength is in knowing what to observe and when to apply the knowledge gained from such activity. Our Ways of Knowing are embedded in our worldview and are an equal part, not artefact. In this system, not one person knows all, but people have and share sets of knowledges for their particular roles. This has personal, totemic and ancestral components that signify gender, life stage and role responsibilities and rites. There are various types of knowledges, which have different levels that have to be operational for the group to be functional. Our Ways of Knowing are consolidated through people exercising their connections to country. Every time we fish, gather, camp, talk about or walk on country we engage our Ways of Knowing which shape for us our identities and particularly relationships to country, people and other Entities. They are socially refined and affirmed, giving definition and meaning to our world. Without 'knowing' we are unable to 'be' (Martin 2008).

The following terms of reference provide further clarification to this discussion:

- our worldviews, our knowledges and our realities are distinctive and vital to our existence and survival;
- Aboriginal social mores are essential processes by which we live, learn and situate ourselves as Aboriginal people;
- social, historical and political contexts shape our experiences and lives of past, present and future;

- processes for neutralising or decolonising the impacts of imperialism and colonialism are core to these contexts;
- the voices, experiences and lives of Aboriginal people and Aboriginal lands must be centered (Rigney 2001; Martin 2008).

Colonialism and Created Tensions

In terms of the projects of ecological development and sustainability, Aboriginal people gave but the actual benefits, or the costs, have never been analysed (Bama Wabu 1996). Western legal definitions offer Aboriginal knowledges no protection from exploitation, undisciplined consumerism or theft. Legal instruments pertaining to copyright, patent or trademark have served to protect ownership rights and not the intellectual property rights, cultural and moral rights of Aboriginal peoples:

knowledge is commodified to the extent that it is considered a “good” that can be traded or purchased. . . Commodification is about compartmentalisation. It is positivistic and technological. (Hingangaroa Smith 2002, p. 217)

A critique of the discourses of sustainability reveals the relationships referred to are about the dominance of people over nature. There may be a level of concern, but there is no accountability of past actions to present and future relationships as these are locked into time and space, but not across time and space. In this way, the inter-connection of ontology, epistemology and axiology has been deliberately erased from colonising minds or it is so deeply embedded that it is an assumption that is barely recognised and never questioned. Other assumptions exist in that:

- knowledge is an individual entity and the pursuit of an individual, therefore creativity is an individual entity and the pursuit of an individual,
- knowledge is reducible and therefore creativity is removed from an ontology, epistemology and axiology, it is separable from and generalisable to any context,
- thus one’s knowledge, or in this discussion, one’s creativity, its representations and applications are controllable, because they are consumable.

Thus the promise of ‘global citizenship’ has never been fulfilled by Aboriginal peoples because it has never been enacted by nation states, globally, locally or regionally:

The globalisation of knowledge and Western culture constantly reaffirms the West’s view of itself as the centre of legitimate knowledge, the arbiter of what counts as knowledge and the source of ‘civilised’ knowledge. This form of global knowledge is generally referred to as ‘universal’ knowledge, available to all and not really ‘owned’ by anyone, that is, until non-Western scholars make claims to it.

(Tuhiwai Smith 1999, p. 62)

The discourse of creativity signals no change to this situation in that the creative subject relinquishes his/her

intellectual property to be commercialised and consumed. There is nothing inclusive, transformative or morally sound in this latest promise. There has been no interrogation of the assumptions of the ontological, epistemological and axiological tenets underpinning the push for creativity and the creative subject. Such an interrogation would serve to reveal there is no such thing as ‘new’ knowledge, nor is it value free. It would reveal there are no natural or neutral spaces because knowledge is framework dependent. Therefore, there is no single or legitimate way to experience, view and represent the world (Ladson-Billings 2000). These tensions are of power and how it is used to dominate and privilege those individuals already benefiting from this relationship, otherwise referred to as ‘success’. The creative project must be thus: creative. It must be reflexive to these tensions and the inherent plural nature of ontology and epistemology (Agrawal 1995; Hosking and Ramsay 2000; Gergen 2002). This in itself is a creative turn.

Creative Tensions

As part of the restoration of Indigenous knowledge and heritage, Indigenous scholars must confront the assumption of the state of nature. The theories and the choices behind this assumption require analysis by those Indigenous peoples who have survived colonialism and are seeking to transform it. They require a critique from the vantage point of Indigenous thought (Youngblood Henderson 2002, p. 32).

By the very plural nature of the world and of humans, we reside in contradictory spaces. Subjectivities in these spaces are engaged by Aboriginal peoples through series of ongoing micro negotiations to neutralise, as much as this is possible, the tensions and impacts of colonialism, its social and economic discourses. Our survival is inextricably entwined with our sovereignty, our intellectual traditions as represented by our cultural traditions that have evolved over time to consume colonial knowledge forms and traditions. The issue of recognition of Aboriginal knowledges is marginally less important than how we maintain control of its representations and its use (Tuhiwai Smith 1999). The commodification of Aboriginal knowledge is fraught with tensions that are multiple, dynamic and ongoing.

The navigation of such terrains is demanding work for Aboriginal people and Aboriginal scholars in particular. It is a complex and difficult navigation that shortens our lives, reduces our quality of life and endangers our worlds as we know these. The crossing of these terrains is not just spatial. It is temporal, cultural, intellectual and physical. Under these circumstances, the goal is not the reduction and replacement of our ontology, epistemology and axiology, but the expansion and evolvment that incorporates colonial thought, practice and ethics. The goal is to make explicit the ways

power remains in these latest discursive turns and how they've been kept alive from earlier times.

Coming to know the past has been part of the critical pedagogy of decolonization. To hold alternative histories is to hold alternative knowledges. The pedagogical implication of this access to alternative knowledges is that they can form the basis of alternative ways of doing things.

(Tuhiwai Smith 1999, p. 34)

Thus, critique becomes a project that must tell us what is wrong and what is to be avoided if we are seeking relatedness, agency and sovereignty in research. The project of critique tells us how the Stories are related and thus how to create spaces, in particular the conceptual spaces, to draw forth elements from our own ontologies and epistemologies.

Again, at this crucial juncture, change rests on who determines how creativity is defined which determines the forms of creativity that are valued. This equally determines who and what will be excluded and how. Creativity is dynamic, fluid and organic set of engagements, responses and evolvments to an experience and a context that are its 'boundaries' that determine what is real and what is good. These are dire warnings for the current debates and discourses of creativity and the creative subject in perpetuating the very same relationships of domination, control, exclusion and erasure as those enacted in the previous ecological development and sustainability discourses of the 1990s.

If the challenge is to 'unknow the everyday, taken-for-granted categories' this in itself is a creative enterprise requiring more than a cute idea. It requires ongoing interrogation of privilege, power and relationships. But even with these prior experiences and prior knowledge, is remains a matter of necessity, not choice; of inversion not conversion; of repetition not innovation and of stagnation not creativity. The more things have changed creatively. . .the more they have creatively stayed the same.

Note on Contributor

Dr Karen Martin is a Noonuccal woman from Minjerripah (North Stradbroke Island, south east Queensland) with Bidjara ancestry (central Queensland). She has published and presented widely in the areas of Aboriginal knowledges and Aboriginal research. Karen's doctorate was conferred in March 2007, when she was also awarded the James Cook University Medal. She was jointly awarded the Australian Association of Research in Education Doctoral Research Award. Karen is currently Associate Professor: Early Childhood, School of Education, Southern Cross University (Lismore); the Deputy Chair of the Steering Committee of the Longitudinal Study of Indigenous Children, and a Board

Member of the Indigenous Clearing House of the Australian Institute of Health and Welfare.

References

- Agrawal A (1995) Indigenous and scientific knowledge: some critical comments. Retrieved 28 Aug 2001 from <http://www.nuffic.nl/ciran/ikdm/33/articles/agrawal.html>
- Bama W (1996) Reasonable expectations or grand delusions? Submission to the draft wet tropics plan. Cape York Land Council, Cairns
- Chalmers G (2007) Aboriginal knowledge in the Australian market place: different issue, same story. In: Kapitze C, Peters MA (eds) *Global knowledge cultures*. Sense, Rotterdam, pp 119–132
- Davis M (2005) *Undertaking projects and research in Central Australia*. A report prepared by Central Land Council and Desert Knowledge Cooperative Research Centre. CRC, Alice Springs
- Escobar A (1996) Constructing nature: elements for a poststructural political ecology. In: Peet R, Watts M (eds) *Liberation ecologies: environment, development and social movements*. Routledge, London, pp 46–68
- Gergen K (nd) (2002) Social theory in context: relational humanism. Retrieved 21 Sept 2002 from <http://www.swarthmore.edu/SocSci/kgergen1/text9.html>
- Hill R, Smyth A (1999) Collaborative environmental research with Kuku Yalanji people in the wet tropics of Queensland Worlds Heritage Area, Australia. In: Posey DA (ed) *Cultural and spiritual values of biodiversity*. Intermediate Technology Publications, London, pp 227–232
- Hingangaroa Smith G (2002) Protecting and respecting indigenous knowledge. In: Battiste M (ed) *Reclaiming indigenous voices and vision*. UBC Press, Vancouver, pp 209–224
- Hosking D, Ramsay C (2000) *Research, intervention and change: a constructionist contribution to process*, Aston Business School Research paper series. Aston Business School Research Institute, Birmingham, RP0004
- Ladson-Billings G (2000) Racialised discourses and ethnic epistemologies. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*, 2nd edn. Sage, London, pp 257–277
- Martin K (2008) *Please knock before you enter: aboriginal regulation of outsiders and the implications for researchers*. PostPressed, Tenerife
- Moreton-Robinson A (2001) *Talkin' up to the white women: indigenous women and feminism*. UQ Press, St Lucia
- Peet R, Watts M (eds) (1996) *Liberation ecologies: environment, development and social movements*. Routledge, London
- Posey DA, Duffield G (1996) *Beyond intellectual property: towards traditional resource rights for indigenous peoples and local communities*. International Development Research Centre, Ottawa
- Rigney L (2001) A first perspective of Indigenous Australian participation in science: framing indigenous research towards Indigenous Australian intellectual sovereignty. *Kaurna High Educ J* 7:1–13
- Smith N (2000) *Collaborative research possibilities in Cape York: a report to the tropical savannas CRC*. Balkanu Cape York Development Corporation, Cairns
- Tuhiwai Smith L (1999) *Decolonizing methodologies: research and indigenous peoples*. Zen Books, Otago
- Youngblood Henderson J (2002) Aukpachi: empowering aboriginal thought. In: Battiste M (ed) *Reclaiming indigenous voices and vision*. UBC Press, Vancouver, pp 248–278

Justin O'Connor

Abstract

This chapter takes up some of the substantive arguments of Hay and Kapitzke, and Graham, around the notion of creativity. It suggests that despite its convenient misuse by policy-makers it responds to a substantial shift in a contemporary mode of governance. It also suggests that this cannot simply be written off as a neo-liberal strategy or a further disciplinary turn of the screw. Creativity responds to some vital contemporary aspirations for individual autonomy and emancipation which were given impetus from the social movement and urban popular cultures of the 1960s. The contemporary use of creativity within 'creative industries' has both uses and abuses these aspirations. The paper suggests also that the temptation of many Foucauldians to see everything as a ruse of power can often undermine their own aspirations to emancipate the subject.

Keywords

Creativity • Creative industries • Knowledge society • Foucault • Culture

For the most part I am in agreement with Kapitzke and Hay's (2013) core argument that the shift to creativity can be seen as a problem of governance. Graham's (2013) response that 'the function of large policy making bureaucracies *is* to govern' neither does justice to either the historical specificity and mutability of bureaucracies and governments, nor to our ability to challenge *how* they govern and for whom. Graham argues that creativity 'is simply a policy thrust *du jour*' and that to explain its role as that of disciplining subjects misses the point:

Creativity is a semantic well suited to hosing down or glossing over the facts of a [education] system that is broken. . . Far from being an unambiguously sincere policy direction, the push for creativity can be seen as a PR ameliorative against the increased standardisation and mechanisation of education.

The immediate problem with this is that it pushes the question of governmentality from 'creativity' to 'standardization

and mechanization'. Creativity is merely a nice sounding PR word, which masks this latter. The question for education researchers to consider is what is behind this standardization and mechanization, why does it now need to be masked and why with the word 'creativity'? Foucauldians would not suggest that every word in play has been carefully selected as a cog in a well-crafted strategy of governmentality. Words have a kind of free play, a semantic autonomy, which can be used in a tactical (or even hand-to-mouth) way by administrations. Indeed, they can explode in their faces and/or be hastily dropped ('Third Way' anyone?). In that sense Graham is correct to highlight the pragmatic or cynical grasping of certain words from the 'semantic well' for use in the ephemeral froth of contemporary PR driven politics. But I would suggest creativity is not such a word.

For example, the 1998 renaming of 'cultural industries' as 'creative industries' in the UK came out of a late night policy session in London, with the new Media, Culture and Sports minister needing a paper for his meeting with the Treasury the next morning. Pleading for money with hard-nosed City types, 'culture' was not going to cut it. At the last moment 'creative' was suggested and enthusiastically

J. O'Connor (✉)
Faculty of Arts, Monash University, Victoria 3800, Australia
e-mail: justin.oconnor@monash.edu

accepted. Certainly a dip in the semantic well, but one bubbling up from the seismic shifts and geological reconfigurations that had been building pressure for some time. The notion of 'creative industries' rapidly spread far beyond its original provenance. It was seized upon and promoted in ways that exceeded any cynical policy word *du jour* – even if this did take the government by surprise.

Kapitzke and Hay point to the uncertainty caused by globalized competition and the consequent demand that subjects prepare themselves for a world of risk and unpredictability where endless innovation is the only means of survival. That this implies a new governmental project, one that requires subjects to do the necessary work of the self on the self, stands in a fairly well established line of sociological critique going back at least to Beck's (1992) Risk Society. Of course standardization and mechanization are clearly still with us, but 'creativity' is not simply a new duvet cover for this, it is an essential adjunct to a deep-seated process of socio-economic transformation in which 'culture' becomes a much more prominent tool of governmental strategies. It is part of what Steve Redhead (2004) called 'the new cultural state'.

I do however have some issues with Kapitzke and Hay's account. It remains abstract, even functionalist – a new education into the necessity of innovation and risk in a globalised economy is required and then achieved. It needs more precise grounding within the changing dynamics of management and labour in this new global economy, as well as the complex cultural and political transformations that accompany these. In particular neither they nor Graham give enough weight to the newly productive role of culture and art within this new configuration – concepts upon which creativity is parasitic. Kapitzke and Hay ignore the very real and sincere proselytizing for a new kind of creative education by popular writers such as Charles Leadbeater (2008) and Ken Robinson (1999). These two attack the industrial model of educational 'standardization and mechanisation' as outmoded: destructive of the talent needed for the 'creative economy' but also of individual potential and fulfillment. They articulate some widely held feelings that are clearly echoed in Graham's own account of governments' cynical lip service to these creative aspirations.

The problem Leadbeater and others (e.g. Leadbeater and Wong 2010) face when linking these educational ideals to the vision of a creative economy, is that on the one hand, there is not enough creative work to go around (and mechanization and standardization are appropriate for routine office work) and on the other, this creative work has increasingly lost autonomy as it becomes more capitalized (hence the need to monitor, regulate and standardize).

Nevertheless Kapitzke and Hay's account of governmentality tends to ignore the really liberating aspects of 'creativity' and fails to register the historical process by

which these aspects have been annexed by the state and big business. Indeed, it often seems in the Foucauldian tradition that all such aspirations to liberation will inevitably be annexed because they are already caught in the trap of the subject (cf. Aiston 2013). It is interesting that Kapitzke and Hay use the term 'enlightenment' in the first sentence. For Foucault 'enlightenment' is precisely the point at which the modern subject is created as a site for the elaboration for a new kind of power: governmentality. Kapitzke and Hay (p. 286) evoke another kind of creativity at the end:

Our concern is that this current understanding of creativity precludes other transgressive and culturally enriching creativities that represent the infinite range of subjectivities associated with imaginative human capacity and activity.

The problem faced by many Foucauldians is that the grounds on which such a 'transgressive and culturally enriching' creativity could be established is undermined by their view that the subject is always constructed, and that as such the state or disciplinary power is always going to win. I would argue however that 'creativity' has to be addressed not just as a discourse of disciplinary power but as a set of real social, cultural, political and economic aspirations with which the state and big business have to deal. What Graham misses and Kapitzke and Hay register only in part is something Martin (2013) clearly sees: that these cultural values and aspirations are also a resource to be exploited. They are now deemed productive.

We can see this in the case of the shift of the 'information society' theory focus from the routine ability to 'process knowledge and manipulate symbols' (Castells 1989) towards a more innovative capacity involving bending the rules, working 'outside the box', using para-rational or intuitive knowledge, operating as a maverick – all of which drew on images of the visionary artist and scientist. The cultural capacity required for such 'innovative milieu' thus went beyond measures of educational achievement towards a wider cultural capacity akin to Raymond Williams' 'culture as a whole way of life' now mobilized as a key economic resource – or identified as dysfunctional drag. It is in this context that Florida's (2002) 'creative class' come to be seen as indicators of an economic success dependent on the cultural capacities of tolerance, openness, and bohemian and Gay lifestyles. Florida's (2002) attraction is that he claims to be able to show cities how to build such a cultural soft infrastructure. Equally we might point to the ways in which the Schumpeterian entrepreneur, making a comeback against the Fordist 'organisation man' of the 1950s and 60s, became associated with 'the rebel'. Entrepreneurs worked at the edges of the system, pushed its boundaries, explored new territories, confronted ossified ways of doing. Schumpeter's (1942) 'creative destruction' had clear links with the thrust of cultural modernism, its iconoclasm and shock of the new.

By the end of the 1970s entrepreneurs and artists (subsequently identified as ‘bourgeois-bohemians’) occupied the same space as society’s outriders, productive rebels who might glimpse the outline of the future.

These brief sketches indicate how the discourse of creativity could come together in the 1990s and be positioned as universal resource. However I suggest that this would not have been the case without the growth of the ‘cultural economy’ itself; that is, of commercial cultural commodities (CDs, film, books, television etc.) and the increased cultural or ‘symbolic’ content of other goods and services (design, cultural tourism, ‘experience goods’). The economic growth of these sectors and the legitimation of popular or commercial culture vis-à-vis ‘high art’ suggested an ending of the (false) opposition between art and industry, culture and economy, and the beginning of a new, more productive and more creative age. It was wishful thinking embraced by both sides of the divide. More pointedly, if the cultural or symbolic dimension was now a major source of value right across the economy then the particular skills of those able to operate in this risky, volatile and maverick cultural sector would be at a premium. ‘Creativity’ is thus positioned as a set of economically valuable skills and becomes exemplary for almost any activity you chose to mention.

But it crucial that we do not dismiss creativity as meaningless – Graham’s ‘purr-word’ – nor as a discursive construct of power-knowledge. The idea that economic competitiveness relied on a wider cultural capacity also animated much of Left ‘alternative’ economic thinking in the 1970s and 1980s. Cultural geographers countered neo-classical economic theory with socio-cultural embeddedness. This could be seen as both protection against globalization – local tacit knowledge is hard to duplicate – and a resource for sustainable local economic activity. Ideas such as this were behind much of the Western urban regeneration efforts of the 1980s and could have a progressive character embracing local markets and cultural identities.

We might also see progressive outlines in the origins of Florida’s ‘creative class’. In the 1970s Bell’s (1973) and Toffler’s (1980) ‘symbolic workers’ and the ‘knowledge class’ had been characterized in terms of high levels of autonomy and requirements for job satisfaction, both of which were linked to a strong set of social and ethical concerns. This is also outlined by Boltanski and Chiapello (2005) in the case of France, where white-collar workers began to push for greater job autonomy and explicitly linked themselves to the progressive political ideas of post-1968.

‘Knowledge workers’ seemed positioned to inherit the world. This did not turn out to be so, as ‘Post-Fordist’ restructuring and a rightwards political shift repositioned these workers far away from the (no longer) social-democratic managerial state. They retained their aspirations for autonomy, job satisfaction and indeed their ethical

concerns – but they were less linked to any political agenda. This can clearly be seen in Florida’s ‘creative class’ who retain the desire for autonomy and fulfillment, and have the post-68 ethics of tolerance and penchant for bohemian values, but have to be reminded, as they drive their SUVs, that there are others worse off than themselves.

Schumpeterian entrepreneurs also found their counterparts in the post-punk urban milieus of Europe, Australia and North America. Searching for a way beyond the routine alienations of the 9–5, the ability to make a living producing art outside the formal economy (and the formal publicly subsidized art economy) was something they actively sought as part of a radical political agenda. The compromises and self-made traps these have now landed themselves in are now subject of work around ‘cultural work’ and ‘precarious labour’.

The productivity of culture, like the productivity of nature and of human labour, can be used and abused. The invocation of ‘creativity and innovation’ does not ultimately rely on the search for solutions to the problems facing the world or new ways of being together or of experiencing the world – Graham is exactly right on this. It relies on their ability to generate profit. The rise of cultural consumption – where the ability to express identity and taste supersedes functionality – is held to be a solution to the problems of advanced economies in the post-Fordist, globalised age. As we now know it is part of the problem.

Kapitzke and Hay open with a quote from Leadbeater’s *We-Think*, in which a profoundly de-politicised advocate for the digital future desperately tries to think a new progressive collectivity. In his own way, it is a return to the questions of enlightenment that are so often traduced by poststructuralism. How is society possible in a world of individuals; what measures can be set to frame our power over humans and nature? We can’t go back from modernity, and the Faustian genie of creativity cannot be put back. But we have to find ways of setting limits, finding the measure of our creativity not just worshipping its infinite productivity. Martin is right in bringing an outside perspective to the task of defining a new kind of modernity beyond that of endless innovation and exploitation. Surely it is in this area that education is so utterly vital; not to re-tool subjects for a creative economy but to make them reflect on the means and the ends of that economy, and to explore the possibilities of different worlds.

Note on Contributor

Justin O’Connor is Professor of Communications and Cultural Economy at Monash University. Until 2012 he was Professor in the Creative Industries Faculty, Queensland University of Technology, Brisbane, Australia and visiting Chair, Department of Humanities, Shanghai Jiaotong University. Until September 2008 he was Professor of Cultural

Industries at the School of Performance and Cultural Industries, University of Leeds, where he led an MA in Culture, Creativity and Entrepreneurship. His main areas of interests are contemporary urban cultures, cultural and creative industries, cultural policy and urban regeneration. Between 1995 and 2006 he was Director of Manchester Institute for Popular Culture at Manchester Metropolitan University. His research led to the establishment of Manchester's Creative Industries Development Service (www.cids.co.uk) the UK's first dedicated local economic development agencies for the creative industries.

References

- Aiston N (2013) Educational research as science? A critical question. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht
- Beck U (1992) *Risk society: towards a new modernity* (trans: Ritter M). Sage, New Delhi
- Bell D (1973) *The coming of the post-industrial society*. Basic Books, New York
- Boltanski L, Chiapello E (2005) *The new spirit of capitalism* (trans: Elliott G). Verso, London
- Castells M (1989) *The informational city: information technology, economic restructuring, and the urban-regional process*. Blackwell, Oxford
- Florida R (2002) *The rise of the creative class: and how it's transforming work, leisure, community and everyday life*. Basic Books, New York
- Graham P (2013) Reimagining creativity – critically, ethically, and practically: a critical response to Kapitzke and Hay. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 289–292
- Kapitzke C, Hay S (2013) The creativity imperative: implications for education research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 281–287
- Leadbeater C (2008) *We-think: mass innovation not mass productivity. The power of mass creativity*. Profile Books, London
- Leadbeater C, Wong A (2010) *Learning from the extremes*. Cisco Systems, San Jose, CA
- Martin K (2013) The more things change, the more they stay the same: creativity as the next colonial turn. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 293–296
- Redhead S (2004) Creative modernity: the new cultural state. *Med Int Aust Inc Cult Policy* 112:9–27
- Robinson K (1999) *All our futures: creativity, culture and education*. Report to the National Advisory Committee on creative and cultural education. Department of Culture, Media and Sport, London
- Schumpeter J (1942) *Capitalism, socialism and democracy*. Harper & Brothers, New York
- Toffler A (1980) *The third wave*. Bantam Books, New York

Beyond the Giving and Taking of Accounts: Time, Space and the Social in Educational Research with Youth

41

Marcia McKenzie

Abstract

This chapter discusses the complications and possibilities that arise when we consider the ways in which any accounting of, for and by youth is embedded within time, space and the social. As we realize how identity is dependent upon contexts and places, and the ways in which historical and personal memory act to filter how we understand the world and ourselves in it, the impossibility of articulating a full account of oneself becomes more evident. Likewise the task of investigating the experiences of others is bound up in the same complexities. This chapter then examines the implications of these issues for the engagement of youth in educational research, focusing in particular on youth and researcher narrative and memory, the visible and material, and researcher as insider/outsider.

Keywords

Methodology • Place • Space • Time • Youth studies

[I]t would seem obligatory, if not urgent, to return the question of responsibility to the question 'How are we formed within social life, and at what cost?'

(*Giving an Account of Oneself*, Butler 2005, p. 136)

In a 1992 review of research in education, Erickson and Shultz write: "virtually no research had been done that places student experience at the centre of attention" (p. 467). Almost two decades later, the educational studies carried out each year focusing on various aspects of the student experience are beyond counting. These inquiries include the use of research methods such as interviews, focus groups and web-based exchanges; photographs and arts-based forms; and a diversity of approaches to participatory and action research. This 'new wave student voice movement' (Cook-Sather 2006) is part of a broader movement towards educational research with and by populations who were previously objects of study represented in the words and conceptual frames of researchers. However,

despite the good intentions of engaging children and youth as part of how they are represented in educational research, it has become increasingly clear that this is, and must be, complicated work.

The growing acknowledgement of the difficulty of representing the voices of youth in educational research is due to a larger shift towards understanding individuals as embedded within contexts and relations that are responsible for shaping their identities. Thus instead of a conception of the individual as capable of relatively independent thought and action, and coherence and consistency over time and place, there has been a turn towards viewing research participants' 'voices' and actions as manifesting various aspects of their shifting situatedness within and across contexts. This situatedness involves social and cultural norms that have developed historically and that are practiced and passed on in everyday life, as well as the spatial contexts in which peoples lives take place. These contexts include particular physical locations, such as educational venues and institutional forms, while more broadly they also entail lives increasingly mediated by technologies and other layerings, such as the global mobility of bodies and subjectivities, desires and cultures, ideas and possible conflicts.

M. McKenzie (✉)
Department of Educational Foundations, School of Environment and Sustainability, University of Saskatchewan, Saskatoon, SK, Canada
e-mail: marcia.mckenzie@usask.ca

This chapter then considers these and other related interwoven contexts under the placeholders of ‘time,’ ‘space’ and the ‘social’, and examines what a greater consideration of their influence on the formation of youth means for how youth are understood, and thus engaged and represented, in educational research. As we realize how identity is dependent upon contexts and places, and the ways in which our senses of historical and personal memory may act to filter how we understand the world and ourselves in it, the impossibility of possessing and articulating a full account of oneself becomes more evident. Likewise the task of mapping the experiences of others is bound up in the same complexities. As Butler suggests in the opening quotation, to seek to engage in ethical research involving ourselves and others, requires a focus on the broader contexts and effects of the formation of the individual. This includes turning our attention to the *becoming* of youth, as well as to thinking about the roles our research plays in enabling or regulating possibilities for and with youth. In other words, it is not enough to consider what youth *say* or to simply allow them to speak for themselves, but rather as adult or youth researchers, it is incumbent upon us to consider the broader contexts of youth formation and whether and how those contexts are considered in our research. Likewise, we also need to attend to the work our research does with and for youth, as they are engaged and represented in potentially more or less helpful ways in and through educational research.

The chapter does not survey the spectrum of research in education involving youth or in overlapping areas of sociology, psychology, health, cultural studies or geography. Rather, it draws attention to some of the complications and possibilities that arise across these domains when we consider the ways in which any accounting of, for and by youth is embedded within time, space and the social. The chapter highlights shifting understandings of how and where youth are constituted as subjects in relation to various contexts of culture and the everyday; for example, in relation to the historical sedimentation of everyday realities and places, global flows of media and culture, and dominant narratives of selfhood and community. It then examines the implications of these contexts for the engagement and representation of youth in educational research, focusing in particular on: youth and researcher narrative and memory; the visible and material; and researcher as insider/outsider. These discussions suggest the ways in which the spatial, temporal and social are interwoven together into what we see and do and become, as youth and once-were-youth, and as researchers representing others or ourselves. As Butler (2005, p. 19) would have it, this is “the context of an enabling and limiting field of constraint,” in which we make our research more intentional, more ethical, and more accountable.

The Study of Youth

‘Youth’ is a relatively recent but also messy construct in human history. As Valentine and colleagues (1998) suggest, it was not until the fifteenth century that ‘children’ first obtained a distinctive representation conceptually different from adulthood. Initially a distinction limited to the upper classes, legislation and the introduction of mass schooling in the nineteenth century gradually popularized the concept and then the institution of childhood as a temporal and development period proceeding adulthood. With increasing numbers of years included in this transition period, the twentieth century brought the elaboration of a number of more specific and often crisscrossing representations of Western youth, including as deviant offender or exuberant consumer. Slippery in its age classifications as well as the legal and opportunity boundaries it denotes, modern conceptions of ‘youth’ are clearly uneven and context-specific (Langevang 2007).

Building on these beginnings, various trajectories of youth study have been evident in the social sciences over the past number of decades, accompanied by methodological preferences. As one dominant strand, youth subcultural theory developed as the study of underground youth activities such as gang participation or drug use, viewed as forms of cultural coalescence and resistance rather than as individualized deviancy (e.g., A. K. Cohen 1955/1997; S. Cohen 1971; Fyvel 1963). Initially linked with working class and outsider identities, subculture work gradually expanded to include a somewhat broader range of youth groupings that share embodied habits and tastes in music, fashion, politics, sport, dance and other social practices. Throughout the 1970s and 1980s, for example, members of the Centre for Contemporary Cultural Studies (CCCS) at the University of Birmingham sought to elaborate the ways in which subcultural styles and ways of life can be understood as a function of, and as forms of resistance to, family, schooling, locality, material realities and dominant ideologies (for example, Cohen 1972; Hall and Jefferson 1976; Hebdige 1979; Willis 1977). Interwoven with participant observation methods of ethnography and textual analysis of youth styles and artifacts, subcultural researchers of this era tended to centre their research representations on socio-political-historical analysis and critique.

However, these approaches later came under criticism on a number of fronts. First, the emphasis on young men, class reproduction and forms of deviancy came to be viewed as limited, particularly as feminist and race-conscious critiques became more common (for example, Gilroy 1987; McRobbie 1980), with associated shifts in *who* was conducting research and *where* it was being conducted (e.g., in homes, bedrooms and more varied cultural contexts)

(Nayak 2003). A second related spectrum of critique derived from developing late or postmodern orientations to identity and culture, which resisted the idea that youth belong to relatively static or structural subcultural groupings. For example, concerned that representing youth through subcultural portraits may serve to reinforce social stereotypes, contemporary strands of youth cultural theory have drawn upon concepts such as ‘hybridity,’ ‘tribes,’ ‘taste cultures’ and ‘youthspaces,’ to suggest the ways in which today’s youth may shift and belong to multiple fluid groupings at the same time and over time (Nayak 2003). These conditions of multiple youth identifications of culture, race, gender, class, sexuality, as well as more subtle aspects of taste and style, can be considered to be part of broader postindustrial circumstances of consumption and service, media and migration (Appadurai 1996; Bauman 2000). Thus, it is argued, these ‘new times’ of cultural and economic globalization and neoliberal individualism contribute to forms of self that are perceived as transient and entrepreneurial, and in parallel to this, more recent approaches to researching youth culture have tended to offer “rich and aesthetically pleasing accounts of young people” that “elide matters of social class and offer little commentary upon the new social divisions that emerge in global economies” (Nayak and Kehily 2008, p. 13).

Bennett (2002) outlines how the earlier trend towards textual analysis and the imposition of theoretical frameworks on collected ethnographic data led to a sense that the sociological study of youth culture was heavily mediated by its representation through theory. Or in other words, some suggested that ‘authentic subcultures’ were ‘produced by the sub-cultural theorists, not the other way round’ (Redhead 1990). Bennett suggests this contributed to a greater emphasis on ethnographic detail in more recent youth cultural research through extensive participant observation, the possible use of ‘insider knowledge’ through the researcher’s situatedness in the research context, and the greater inclusion of youth ‘voice’ and participation in the research process. The latter shift towards youth voice can also be understood as a function of these times, in which a politics of difference and individualization have resulted in dominant conceptualizations of selves as reflexive and self-made (Francis and Skelton 2008; Kelly 2006), and correspondingly, as having led to significant efforts to hear and represent these individual selves or ‘voices’ in research (Cook-Sather 2006). However, other research is increasingly making it clear that these narratives of voice and agentic and ‘entrepreneurial selves’ are also products of culture and neoliberal governance (Bragg 2007; Chatterton and Hollands 2003).

In his cross-cutting and insightful ethnographic study, *Race, Place, and Globalization: Youth Cultures in a*

Changing World, Nayak (2003) both describes and exemplifies a shift from the dominance of earlier approaches of subcultural theorists, towards a growing attention to the micro and macro interpretation of what youth actually do. Through a focus on “a place-specific analysis of youth identities in changing times” (p. 27), Nayak seeks to probe the diverse ‘productions of youth’ in Northeastern England in ways that go beyond static conceptions of subcultures to consider the impacts of globalization, and yet in ways that do not simply reify new dominant conceptions of fragmented and agentic youth identities. In contrast to suggestions that youth lifestyles have become de-territorialized or ‘placeless’, Nayak shows the ways in which youth are indeed still place-bound in a spatially and temporally embedded ethnographic analysis of cultural identity. Or as Nayak says of his place-based study of youth subcultural groupings of ‘Real Geordies’, ‘Carvers’ and ‘B-Boyz’, the emphasis is “upon locally embedded experience and the manner in which social interactions are situated in time and place” (p. 29).

In a very different way, the participatory research of Cahill (2004) with a group of young ‘womyn of color’ in New York City also provides an exemplary case of youth research which considers the functions of time, space and the social in constructing, maintaining and shifting collective youth identities. Building on discussions amongst the youth participants, Cahill outlines three ‘critical turning points’ in this participatory action research (PAR) project: (i) the young women’s emotional motivation to undertake the research – having been ‘made mad’ by the stereotypical portrayals by other researchers; (ii) the difficult process of deconstructing and politicizing their own personal experiences; and then (iii) creating research representations that drew on this work in ‘speaking back’ to various audiences about the stereotypes of women of color through a sticker campaign, a website, and a research report. Cahill discusses how the PAR process provided an alternative place for these young women to engage with and create representations of their lives as youth living in the changing demographics and spaces of the Lower East Side of New York City.

Both of these exemplary studies, as well as the work of a growing number of other researchers both in and outside of the field of education, help imagine how youth research can be provocative and useful in tracing paths between the more enduring and the shifting, the material and the cultural, and in understanding youths and youth culture amid the constraints and possibilities of time, space and the social. Before moving on to explore more specific methodological implications for educational research, it is helpful to get a better sense of underlying orientations to time, space and the social and their importance in thinking about the constitution and productive effects of youth.

Time, Space and the Social

Within the contexts of late or postmodern conditions of globalization and change and associated conceptions of identities as shifting and contingent, there is a rapidly developing body of theory and research that explicitly examines the means by which these changes both operate, and can be resisted, via 'space'. Previous relatively localized orientations to relationships, community and place, affected by new modes of interaction and communication are resulting, for better or worse, in more globalized identities and communities (for example, Appadurai 1996; Castells 1996, 2000). Correspondingly, whereas previously researchers understood and represented the constitution of identities and communities more in historical terms – for example, in genealogical studies which trace the historical development of modes and possibilities of thought and action – there is increasing attention to understanding and representing the effects of spaces near and far, concrete and technological, as also constitutive of our social contexts (Lingard and Gale 2007).

Social scientists including educational researchers, have thus been turning to theorists of space such as Edward Soja, Henri Lefebvre, Neil Smith, Doreen Massey and others, to help think through the ways in which the trialectic of space, time and the social can be understood as interwoven, and the implications of this for the possibilities of empirical research (for example, Gulson and Symes 2007a; *Educational Studies* 45(3), special issue on 'Critical Geographies in/of Education'). Rather than space being understood as an unchanging container for time and action, this work explores the ways in which the realms of time, space and the social are mutually constitutive. Massey (1994), for example, outlines a four-dimensional concept of space-time in which 3-D space and 1-D time, while considered different, are viewed as inextricably interwoven with each other and with the social. As she says, "It is not that the interrelations between objects occur *in* space and time," it is these relationships themselves which create/define, and are affected by, space and time (p. 263). Space is not static over time, nor time spaceless; and likewise, the social is inexorably spatialized and temporalized, and vice versa. This is not at all to say that identities and communities are not situated within very real material conditions, but rather draws attention to the ways in which our socially embedded understandings and actions affect both our perceptions of space and time, and the directions in which they operate as central dimensions of existence. As Massey (1994) suggests, space is shot through with power and symbolism, history and social possibility: a 'power-geometry' or "complex web of relations of domination and subordination, of solidarity and co-operation" (p. 265).

In contrast to orientations to research which view time as grand narrative or space as static, and therefore both 'as stories it is possible to tell' (or ignore as irrelevant), an

orientation to time, space and the social as tangled and changing, prevents the possibility of casual closure and easy representability in our research (Massey 1994). Or as May and Thrift (2001) put it, this means "re-engaging time and space in ways which question the limits of representation in order to represent time and space" (p. 36). To return to the opening quotation by Butler (2005), we can then consider ourselves as researchers as having responsibilities to imagine and offer research representations that endeavor to engage – without casual closure – the complexities of our shifting formations through time, space and the social, and their costs and possibilities. The following sections more specifically probe the methodological implications of these considerations of the effects of time, space and the social on the modes of becoming and being as experienced by youth, and the related limiting and productive effects of the means and ends of youth representation in educational research.

Narrative and Memory

Despite an earlier lack of research focused on actual youth and student experience (Bennett 2002; Erickson and Shultz 1992), by 1999, Moore and Muller report a problematic move towards representing text as 'voice' in educational research, and thus a privileging of the research participant as the one 'who knows' and thus as the authority of 'what is known'. As a range of other work has already suggested, while including multiple and diverse youth voices can be useful in gaining a sense of the complexity of a context and experiences of it, it does not follow that participant 'voices' are enough on their own, or should stand without interpretation (Fine et al. 2000). Indeed, when we view youth as existing within matrices of time, space and the social we can rather consider individual voices as 'cultural larynx' (Bernstein 1990), or more specifically, as performances of their situatedness in temporal, spatial and social contexts. Rather than knowledge situated in the individual, this is rather the individual (including the researcher) situated in knowledge. The question then becomes one of how to probe and illuminate some of these influences and intersections – perhaps especially those that do not manifest themselves in participant voice through interviews or other explicit articulations – in ways that enable us to better account for youth, ourselves as researchers, and most importantly, in thinking differently about the productive possibilities of our educational research.

While so called 'genealogical' research is focused on more general theoretical examination of the historical construction of knowledge (for example, of shifting conceptions of youth or girlhood over time, Driscoll 2002), empirical forms of narrative, psychoanalytic, memory-work, and life or oral history research delve into particular lives in specific times, locations and social contexts (McLeod and Thompson

2009). As one angle on thinking about how we can question the limits of voice in order to better take into account time, space and the social, we can consider the challenges and possibilities of narrative and memory in forms of research that draw on participant or researcher voice. In her analysis of the impossibilities of accurately ‘giving an account of ourselves,’ Butler (2005) suggests how, because we are never present to the origins of our story – in other words, our interactions in our early years are absent from our memory – we can never offer a complete account of ourselves. Likewise, other aspects of our sociality (how we engage with others) and corporeality (like learned gestures or other aspects of body of which we are not conscious), are raveled up in who we are and what we do in ways we can never really access and therefore represent fully. While suggesting that learning to construct a narrative is a crucial practice in assembling a life that is ‘livable’, Butler asks, “What is left out if we assume, as some do, that narrative gives us a life that is ours, or that life takes place in narrative form”? (p. 52).

Researchers take this issue up in various ways in their research. For example, Tamboukou (2008) advocates for an attention to narrative process over narrative sequence: what stories do versus what they are. Why is it that *those* stories are told, and how is the self constituted in their telling, including through what is left out or not articulated. Some use metaphor in an effort to access what is unable to be thought or represented through verbal articulation; for example, in figurations of ‘folds,’ ‘angels’ or ‘dream data’, that are placed in relation to other research text by writers in order to impel alternative interpretations of the data (Lather 2007; St. Pierre 1997). Others suggest techniques of narrative disruption that invite research participants to ‘step outside’ of their narratives through difficult questions, multiple interviews, or historical documentary sources, in order to attempt to tease out collective history from, and in, personal identity, and in so doing enable more complex representations and possibly the shifting of personal identities (Gardner 2003; McLeod 2003; Radstone 2000). As a more concrete example of this, Nayak (2003) discusses his research as an anti-racist ‘pedagogy of place’ enacted through questions about his youth research participants’ historical and geographical trajectories and beliefs about migration, hybridity and difference. Through questions aimed at narrative deconstruction of the youth’s ‘White’ identities and their stereotypes of cultural difference, Nayak seeks to enable them to attend to the complexity of their construction in relation to Whiteness, racism, and nationhood, and what this means for how they understand and represent their own identities both in the research and more broadly.

Photovoice and other forms of visual data collection are another means of probing the complexities of time, space and the social in the narrative constructions and absences of youth. ‘Places’ can be understood as existing at the confluence of the spatial and historical, as well as the locations of our social interactions (Casey 1996). They are thus imbued and interpreted with an enormous variance of meaning. Visual ‘capturings’ of these places and research participant explanations of them through techniques such as photovoice, offer a means of accessing the otherwise unsaid and unremembered, or of disrupting the otherwise articulated. With photographs taken by participants acting as another means of ‘voice’, the photovoice method can enable different insights into the social and material realities that affect their everyday lives, and richer research representations as a result. As McNytre (2003) reflects, photographs and accompanying texts created by her research participants generated “a sense of disruption in the ways they organize their lives”, undermined those stories that served to “bolster the official record of events”, and through opportunities to articulate, reframe, and discuss, “led to a more nuanced read of their everyday lives” (pp. 63–64).

A final consideration of narrative and memory to highlight in relation to the representation of youth is the role played by adult memory in research on youth. Related to questions of insider/outsider status of youth researchers, is the fact that adult researchers have all been youth. Building on the ways in which the traces of memory act to construct our stories and our lives, Biklen (2004) suggests how the memories of adult researchers of their *own* youths can “creep in and perhaps take us away from important questions about our informants’ lives that need to be asked” (p. 725). Citing different class-based relationships to consumption and fashion as an example of how a researcher may interpret youth participants in particular ways based on their own experiences, Biklen highlights the importance of interrogating the memories raised, and unavailable to, the researcher while studying youth. As Talburt (2004) writes, researchers “may not be able to account for the multiple times and places that traverse them, their social and academic practices,” and “cannot fully represent or account for the memories that haunt their [research]” (p. 119).

The Visible and the Material

Perhaps the most central aspect of considering time, space and the social more thoroughly in the representation of youth is to realize the need to get beyond matters of ‘voice’ altogether. While narrative and memory have their uses, as suggested above, a broader accounting requires us to seek

out explications of what is left out of the narratives of youth or researchers (Butler 2005). As part of this, what can we learn that is relevant to youth by examining more closely the visible and material manifestations of the milieu of space-time (Massey 1994)? As Nayak (2003) suggests, this means observing what youth do, but also entails considering the everyday material conditions that enable and constrain their actions. A range of theoretical framings help to explore the embeddedness of youth in material conditions further, such as the idea of everyday bodily habits as ‘history turned into nature’ or as ‘society embodied’ (Bourdieu 1977; Van Wolputte 2004), or viewing humans as part of a larger web of ‘actants’ – human and non-human, technological and organic – that ‘hold each other in position’ and determine individual actions (Haraway 1997; Latour 2005; Thrift 2008); or through understanding cultural practices (including pedagogies) and personhood as deeply interwoven within particular places and contexts (Anzaludúa 1990; McKenzie 2008; Smith 1999). Without drawing on a particular framing in further detail here, I briefly highlight three related realms of attention in considering the representation of that which exists beyond the articulated: the body, place, and movement through space.

As part of the ‘material infrastructure’ of the production of selves, belonging and identities, bodies can thus be considered subjects rather than objects, or as “the existential ground of culture” (Van Wolputte 2004, p. 257). Embodiment can be viewed as about making sense in ways that are prereflexive, though not precultural, and as Van Wolputte (2004) suggests, the body can be viewed as functioning as the meeting ground of dominant and counterhegemonic practices. Thus research can focus on examining how personal and social *becoming* operates via the body, often through a focus on the quotidian or everyday. A clear example of this is offered in Nayak’s (2003) research participants’ representation of Charvers: “With their head down and with an arched back and they think they’re dead good... They think they’re real gangstas.” And Nayak comments, “Charvers were regarded as bodily distinct, with differing accents, strange customs and mannerisms. In this way the language ascribed to Charvers took on a corporeal schema that elaborated the broader vocabulary of racism” (pp. 97–98). More broadly, Nayak (2003) explores how the youth he studied adopted various clothing and bodily styles in conforming, and at times resisting, their race and class trajectories in a local-global world. As another example of exploration of the role of the body in the formation of youth, in another recent exemplary ethnography of three male youth, Gustavson (2007) considers how class-based material constraints resulted in youth tattooing of the body as a final effort to find ‘a room of one’s own’ for artistic practice. These examples suggest the ways in which bodies clearly have a history and a geography, and the importance of

considering these contexts as part of youth research (Moss and Dyck 2003).

Vast literatures also consider the social conditions and effects of natural landscapes and built spaces across historical contexts and local and global scales. For example, relevant work has been done tracing historical changes in built forms as an outcome and determinant of social and economic conditions (including school buildings and grounds), and on the role of natural landscapes in framing cultural and social imaginaries, including the pedagogical (for example, Colwell-Chanthaphonh and Ferguson 2006; Cresswell 2003; Gulson and Symes 2007a; Ley 1993; Szerszynski et al. 2003). As Mitchell (2000) writes: “The degree to which landscapes are *made* (by hands and minds) and represented (by particular people and classes, and through the accretion of history and myth) indicates that landscapes are in some very important senses ‘authored’” (p. 102). Places and our representations of them can thus be understood to function as ‘unwitting autobiography’ (Cajete 1994; Mitchell 2000). Gendered, classed, raced, consumer, and ‘wild’ landscapes, including ‘learnsapes’ (e.g. Skamp 2009), can also be understood as acting as means of reproduction: constituting personal, pedagogical, and collective identities and communities in various and overlapping ways. As examples exploring representations of youth in places, Dillabough and van der Meulen (2007) use media images as a hermeneutic device in examining the historical and media construction of working-class female youth in relationship to space; and increasingly research is attempting to represent the ways in which educational spaces constitute and encourage particular possibilities for youth (for example, Peng 2009; Vadeboncoeur 2009).

Finally, youth-related movement *through* space on a range of scales and through a variety of practices is another consideration when thinking about time, space and the social in the representation of youth. As already indicated, a rapidly expanding body of research across disciplinary boundaries is tracing the effects of globalization and migration on the lives and identities of youth and their communities. For example, *Youth Moves: Identities and Education in Global Perspectives*, edited by Dolby and Rizvi (2008), explores current contexts of mobility and their relationships to youth culture, sense of belonging, and social and material conditions. No longer considering schools as necessarily the predominant pedagogical site for youth, these and other researchers examine the transcultural and homogenous, local and virtual locations in which youth are ‘circulating’ as well as resisting and place-making (for example, Hoerder et al. 2006; Legg 2007; Mirón et al. 2005; Ibrahim 2008).

It is also useful to think about youth-related movement through space on a more localized scale in terms of the specifics of method. This returns us to the notion of the

things that youth do in their everyday lives, as well as to the complexity offered by ethnographic methods of participant observation when accompanied by a close and critical reading of historical and contemporary social contexts. The following excerpt from a study by Youdell (2006) provides a clear sense of the possibilities of observation of the visible:

As well as being a multicultural ‘celebration’, this is also a school fund-raiser and a key part of this is the stalls provided by students, parents, family and friends. . . The Deputy Principal, or a member of his walkie-talkie team, regularly stands in the quad in front of the Arabic Food stall watching. Around the middle of the afternoon I see the Deputy Principal standing with two Arabic boys (aged roughly 16–18) who have been hanging out at the Arabic Food stall on a BMX bike. The Deputy Principal tells the boys to ‘leave the school premises immediately’. One motions towards a student on the stall and replies ‘you told him to invite his family and friends, well I’m his friend so I can be here’. The Deputy Principal responds ‘No, we say who can be here, now please leave’. A while later, the Deputy Principal ejects another Arabic boy, also on a BMX, who has spent the afternoon at the stall. The Deputy Principal says to him ‘You were going to light up on the premises – now leave’. The boy cups an unlit cigarette in his hand. One of the students from the stall asks: ‘Sir, what if I personally vouch for him?’. The Deputy Principal does not respond to this offer and directs the boy away. The Deputy Principal watches me watching. (p. 520)

Insider/Outsider

In the above excerpt we also see the potential of being an ‘outsider’ researcher. Getting a bird’s eye view of events, while still itself embedded in the historical, spatial, and social understandings of the researcher and their contexts, offers a different richness of representation than might be gathered from, say, hearing from the boys at the Arabic Food stall directly, and certainly than by hearing from the Deputy Principal. On the other hand, as Cahill’s (2004) research with ‘The Fed up Honeys’ in New York City illustrates, outsider perspectives can function in ways that perpetuate oppressions across a number of fronts. As one of the ‘young womyn’ involved in the research writes in speaking about other research representations: “How is it that a white, a rich, white woman, can explain why colored poor people do what they do?” (p. 276). Other discussions of the complexities of representing youth raise the researcher’s insider or outsider status as a central consideration, particularly in cross cultural contexts (Hermes 1998; Smith 1999). In a recent edited collection on representing youth (Best 2007), a number of papers explore issues of memory and access across age, class, race, and gender lines that can be a factor when adults research youth, suggesting that insider knowledge is important ethically, can facilitate rapport, and ultimately generate better data. However, highlighting the frequency with which ethnographers of youth culture – often graduate students – do have ‘insider’ familiarity with research participants,

Hodkinson (2005) lists a range of difficulties that can be associated with insider research. These include the diverse and loosely bounded qualities of youth cultures in many contexts, as well as the shifting and multiple orientations of any one youth, which make being an insider in an absolute sense impossible.

More broadly, debates on the realities and possibilities of participatory forms of research are helpful. Encompassing a range of approaches in which those who would previously have been included as the ‘researched’ are directly involved in some or all stages of research, participatory work varies widely in name, particularities of method and populations involved, and the extent of the focus on social change (Fielding 2004; LeGrange 2001; Reason and Bradbury 2000). Despite intentions of enabling the representation of diverse voices and opportunities for collective action, participatory processes also offer partial and situated research contexts, and are imbued with power dynamics that function to silence or perpetuate in unintentional and intentional ways. When voice is understood as ‘cultural larynx’ (Bernstein 1990), participatory research itself comes to be understood as performing culture or as a form of governmentality (Bragg 2007). Rather than seeing a possibility for the participant to speak or act in genuine ways, this conceptualization of participation is in line with a ‘more distributed view of agency’ (Mannion 2007) in which the self is inseparable from the influences of the temporal, spatial and social. This means that participatory research is no longer thought in representational terms as being about the right to speak, but becomes more centrally about the forms of social and political stasis or change to which it contributes (Fine and Barreras 2001). Faced with this, Kesby (2005) suggests a need to stop focusing on how to differentiate power from empowerment in relation to voice and participation, and instead shift towards thinking further about how they are alike and what this means for the productive possibilities of research.

We see this in Nayak’s (2003) efforts at anti-racist ‘pedagogy’ via research, and more extensively in Cahill’s (2004) articulation of the research of the Fed Up Honeys. As Cahill (2007) writes about the PAR methodology of the *Make Me Mad* project:

What spaces offer more possibilities for different performances of being a young working-class woman of color? A PAR process engaged in addressing issues of power implicitly adopts an understanding of power as ubiquitous and circulating in discourses, representations and spatial practices (Foucault 1975). Whether addressing one’s relation to broader social structures of power and privilege or the differentials of power within the research process, interrogating the asymmetries of power is central to a participatory practice concerned with social change. . . In this light, *conscientização* could then be understood as leading to the development of new subjectivities which may be potentially transformative and challenge hegemonic ways of being. (p. 275)

Here being an ‘insider’ to the research is understood not as an unproblematic articulation of ‘voice,’ but rather as a means for youth themselves to collectively challenge and make sense of their formation within social life (Butler 2005), thereby accounting for themselves in ways that enable greater consideration of how power works within and across their lives. Enabling youth to examine their lives more thoroughly in relation to temporal, spatial, and social contexts offers a more systemic orientation to the issues they face, and perhaps, entails greater power in their production of identity and culture. Rather than a politics of representation concerned with more accurate truth telling, this instead suggests a ‘politics of inhabitation’ that involves the exploration and enabling of alternative and renewed identities, communities and places (Hinchliffe 2003).

Conclusion: The Productions of Youth

Through outlining various current research strategies and considerations, this chapter suggests possible directions for educational researchers hoping to better account for the embeddedness of youth within temporal, spatial and social contexts. Examining considerations of narrative and memory, the visible and material, and researcher as insider/outsider offers possibilities for richer and more complex research studies that go beyond what youth say, to help illuminate how they have been formed and the possible implications of this for educational scholarship and practice. Unlike some other approaches to educational research, grappling with considerations such as these prevents any easy recommendations for research practice. Instead research becomes a matter of working between empirical sites and theoretical work, seeking to consider the yet unconsidered, to understand and imagine in unpredicted ways (Appadurai 2000). What is very clear is that as researchers concerned with the ethical engagement of representation of youth, this requires attending closely to broader contexts of subject formation, as well as to the ways in which one’s research more or less helpfully affects the productions and directions of youth.

May and Thrift (2001) ask, “How can we inhabit the present as if it was a place, a home rather than something we pass in a mad scramble to realize the future? Somewhere here there is a politics, part feminist, part ecological, part visionary which can help us to stop and ponder what we are doing” (p. 37). Drawing on Lefebvre (1974/1991), they suggest that thinking about time and space in new ways can provide “a kind of psychoanalysis of the intricate space-time of the everyday lived” (p. 31). As Lefebvre (1996) writes,

Every rhythm implies the relation of a time with a space, a localized time, or if one wishes, a temporalised place. Rhythm is always to such and such a place, to its place, whether it be to the heart, the fluttering of the eyelids, the movements of the street, or the tempo of a waltz. This does not prevent it from being a time, that is an aspect of a movement and a becoming. (p. 230)

In the context of the giving and taking of accounts in representing youth, this is to say, how can we better account for youth becomings as temporally, spatially and socially constituted through our greater attention to representing the rhythms of the pedagogical? In a ‘totally pedagogized society’ in which all relations can be viewed as pedagogical ones (Bernstein 1990), youth are constantly being ‘educated’ through social and cultural norms and practices, often with devastating effects on their daily lives as well as their futures on ‘a planet in crisis’ (Obama 2008). These conditions suggest the responsibility of educational researchers to investigate orientations to space and place that go beyond the metaphorical, to consider in urgent and hopefully useful ways how we are representing, affecting and inhabiting the material realities and productions of youth identities, communities and places (Gulson and Symes 2007b). As Butler (2005) says, this requires the researcher to also ‘become undone’: “to vacate the self-sufficient ‘I’ as a kind of possession” (p.136), and suggests the need to imperfectly consider our own investments and directions in educational research, in order to offer accountings that are more responsible both to youth and these times.

Acknowledgements I am grateful to Jo-Anne Dillabough and Alan Reid for their contributions to the directions explored in this chapter.

Note on Contributor

Marcia McKenzie is an Associate Professor in Social Justice and Community-based Education in the Department of Educational Foundations and jointly appointed to the School of Environment and Sustainability at the University of Saskatchewan, Canada. Her research interests include environment and place, pedagogy and educational policy, youth culture and activism, and the politics of social science research. She is co-editor of *Fields of Green: Restorying Culture, Environment, and Education* (2009).

References

- Anzaludúa G (1990) Making face, making soul/Hacienda Caras: creative and critical perspectives by feminist women of color. Aunt Lute Books, San Francisco
- Appadurai A (1996) Modernity at large: cultural dimensions of globalization. University of Minnesota Press, Minneapolis
- Appadurai A (2000) Grassroots globalization and the research imagination. *Public Culture* 12(1):1–19
- Bauman Z (2000) *Liquid modernity*. Polity, Cambridge, MA

- Bennett A (2002) Researching youth culture and popular music: a methodological critique. *Br J Sociol* 53(3):451–466
- Bernstein B (1990) The structuring of pedagogic discourse, vol IV, Class, codes and control. Routledge, London
- Best AL (ed) (2007) Representing youth: methodological issues in critical youth studies. New York University Press, New York
- Biklen SK (2004) Trouble on memory lane: adults and self-retrospection in researching youth. *Qual Inq* 10(5):715–730
- Bourdieu P (1977) Outline of a theory of practice. Cambridge University Press, Cambridge
- Bragg S (2007) 'Student voice' and governmentality: the production of enterprising subjects? *Discourse: Stud Cult Polit Educ* 28(3):343–358
- Butler J (2005) Giving an account of oneself. Fordham, New York
- Cahill C (2004) Defying gravity?: raising consciousness through collective research. *Child Geogr* 2(2):273–286
- Cahill C (2007) The personal is political: developing new subjectivities in a participatory action research process. *Gender Place Culture* 14(3):267–292
- Cajete G (1994) Look to the mountain: an ecology of indigenous education. Kivaki Press, Skyland
- Casey ES (1996) How to get from space to place in a fairly short stretch of time: phenomenological prolegomena. In: Feld S, Basso H (eds) Senses of place. School of American Research Press, Santa Fe, pp 13–52
- Castells M (1996) The information age: economy, society and culture, vol 1, The network society. Blackwell, Oxford
- Castells M (2000) The rise of the network society, 2nd edn. Blackwell, Oxford
- Chatterton P, Hollands R (2003) Urban nightscapes: youth cultures, pleasure spaces and corporate power. Routledge, London
- Cohen AK (1955/1997) A general theory of subcultures. In: Gelder K, Thornton S (eds) The subcultures reader. Routledge, London, pp 44–54
- Cohen S (1971) Images of deviance. Penguin, Harmondsworth
- Cohen P (1972) Subcultural conflict and the working-class community. Centre for Contemporary Cultural Studies, University of Birmingham, Birmingham
- Colwell-Chanthaphonh C, Ferguson TJ (2006) Memory pieces and footprints: multivocality and the meanings of ancient times and ancestral places among the Zuni and Hopi. *Am Anthropol* 108(1):148–162
- Cook-Sather A (2006) Sound, presence, and power: 'student voice' in educational research and reform. *Curriculum Inq* 36(4):359–390
- Cresswell T (2003) Landscape and the obliteration of practice. In: Anderson A, Domosh M, Pile A, Thrift N (eds) Handbook of cultural geography. Sage, London, pp 269–282
- Dillabough J, Van der Meulen A (2007) Female youth homelessness in urban Canada: space, representation and the contemporary female subject. In: McLeod J, Allard AC (eds) Learning from the margins: young women, social exclusion and education. Routledge, London, pp 20–41
- Dolby N, Rizvi F (2008) Youth moves: identities and education in global perspective. Routledge, London
- Driscoll C (2002) Girls: feminine adolescence in popular culture and cultural theory. Columbia University Press, New York
- Erickson F, Shultz J (1992) Students' experience of the curriculum. In: Jackson P (ed) Handbook for research on curriculum. Macmillan, New York, pp 465–485
- Fielding M (2004) Transformative approaches to student voice: theoretical underpinnings, recalcitrant realities. *Brit Educ Res J* 30(2):295–311
- Fine M, Barreras R (2001) To be of use. *Anal Soc Issue Publ P* 1(1):175–182
- Fine M, Weis L, Weseen S, Wong L (2000) For whom? Qualitative research, representations, and social responsibilities. In: Denzin NK, Lincoln YS (eds) Handbook of qualitative research, 2nd edn. Sage, Thousand Oaks, pp 107–132
- Foucault M (1975) Discipline and Punish. Vintage Books, New York
- Francis B, Skelton C (2008) 'The self-made self': analyzing the potential contribution to the field of gender and education of theories that disembed selfhood. *Discourse Stud Cult Polit Educ* 29(3):311–323
- Fyvel TR (1963) The insecure offenders: rebellious youth in the welfare state. Penguin, Harmondsworth
- Gardner P (2003) Oral history in education: teacher's memory and teachers' history. *Hist Educ* 32(2):175–188
- Gilroy P (1987) There ain't no black in the union jack. Hutchinson, London
- Gulson KN, Symes C (eds) (2007a) Education and the spatial turn: policy and geography matters. Routledge, New York
- Gulson KN, Symes C (2007b) Knowing one's place: space, theory, education. *Crit Stud Educ* 48(1):97–110
- Gustavson L (2007) Youth learning on their own terms: creative practices and classroom teaching. Routledge, London
- Hall S, Jefferson T (eds) (1976) Resistance through rituals. Hutchinson/Centre for Contemporary Cultural Studies, London
- Haraway D (1997) Modest_witness@second_millennium. femaleman@meets_onco mouse™. Routledge, New York
- Hebdige D (1979) Subculture: the meaning of style. Methuen, London
- Hermes M (1998) Research methods as a situated response: towards a first nations' methodology. *Qual Stud Educ* 11(1):155–168
- Hinchliffe S (2003) 'Inhabiting' – landscapes and natures. In: Anderson K, Domosh M, Pile S, Thrift N (eds) Handbook of cultural geography. Sage, London, pp 207–225
- Hodkinson P (2005) 'Insider research' in the study of youth cultures. *J Youth Stud* 8(20):131–149
- Hoerder D, Hébert Y, Schmitt I (2006) Negotiating transcultural lives: belongings and social capital among youth in comparative perspective. University of Toronto Press, Toronto
- Ibrahim A (2008) The new flâneur: subaltern cultural studies, African youth in Canada and the semiology of in-betweenness. *Cult Stud* 22(2):234–253
- Kelly P (2006) The entrepreneurial self and 'youth-at-risk': exploring the horizons of identity in the twenty-first century. *J Youth Stud* 9(1):17–32
- Kesby M (2005) Re-theorizing empowerment-through-participation as a performance in space: beyond tyranny to transformation. *Signs J Women in Cult Soc* 30(4):2037–2065
- Langevang T (2007) Movements in time and space: using multiple methods in research with young people in Accra, Ghana. *Child Geogr* 5(3):267–281
- Lather P (2007) Getting lost: feminist efforts toward a double(d) science. SUNY Press, Albany
- Latour B (2005) Reassembling the social: an introduction to actor-network theory. Oxford University Press, Oxford
- Lefebvre H (1974/1991) The production of space (trans: Nicholson-Smith D). Blackwell, Oxford
- Lefebvre H (1996) Writings on cities. Blackwell, Oxford
- Legg S (2007) Reviewing geographies of memory/forgetting. *Environ Plann A* 39:456–466
- LeGrange L (2001) Challenges for participatory action research and indigenous knowledge in Africa. *Acta Acad* 33(3):136–150
- Ley D (1993) Co-operative housing as a moral landscape: re-examining 'the postmodern city'. In: Duncan J, Ley D (eds) Place/culture/representation. Routledge, London, pp 128–148
- Lingard B, Gale T (2007) The emergent structure of feeling: what does it mean for critical educational studies and research? *Crit Stud Educ* 48(1):1–23
- Mannon G (2007) Going spatial, going relational: why 'listening to children' and children's participation needs reframing. *Discourse Stud Cult Polit Educ* 28(3):405–420
- Massey D (1994) Space, place and gender. Polity Press, Cambridge

- May J, Thrift N (eds) (2001) *Timespace: geographies of temporality*. Routledge, London
- McIntyre A (2003) Through the eyes of women: photovoice and participatory research as tools for reimagining place. *Gender Place Culture* 10(1):47–66
- McKenzie M (2008) The places of pedagogy: or, what we can do with culture through intersubjective experiences. *Environ Educ Res* 14(3):361–373
- McLeod J (2003) Why we interview now—reflexivity and perspective in a longitudinal study. *Int J Soc Res Methodol* 6(3):201–211
- McLeod J, Thompson R (2009) *Researching social change: qualitative approaches*. Sage, London
- McRobbie A (1980) Settling accounts with subcultures: a feminist critique. *Screen Education* 34:37–49
- Mirón L, Darder A, Inda J (2005) Transnationalism, transcitizenship, and the implications for the ‘new world order’. In: McCarthy C, Crichlow W, Dimitriadis G, Dolby N (eds) *Race, identity, and representation in education*. Routledge, London, pp 289–306
- Mitchell D (2000) *Cultural geography: a critical introduction*. Blackwell, Oxford
- Moss P, Dyck I (2003) Embodying social geography. In: Anderson K, Domosh M, Pile S, Thrift N (eds) *Handbook of cultural geography*. Sage, London, pp 58–73
- Nayak A (2003) *Race, place, and globalization: youth cultures in a changing world*. Berg, New York
- Nayak A, Kehily MJ (2008) *Gender, youth and culture: young masculinities and femininities*. Palgrave, New York
- Obama B (2008) Election night address, U.S. presidential campaign, Nov 4. Chicago
- Peng P (2009) On transnational curriculum: symbols, languages, and arrangements in an educational space. *Educ Stud* 45(3):300–318
- Radstone S (ed) (2000) *Memory and methodology*. Berg, Oxford
- Reason P, Bradbury H (eds) (2000) *Handbook of action research: participative inquiry and practice*. Sage, London
- Redhead S (1990) *The end-of-the-century party: youth ad pop towards 2000*. Manchester University Press, Manchester
- Skamp K (2009) Understanding teachers’ ‘levels of use’ of learnscapes. *Environ Educ Res* 15(1):93–110
- Smith LT (1999) *Decolonizing methodologies: research and indigenous peoples*. Zed Books, London
- St. Pierre E (1997) Methodology in the fold and the irruption of transgressive data. *Qualit Stud Educ* 10(2):175–189
- Szerszynski B, Heim W, Waterton C (eds) (2003) *Nature performed: environment, culture and performance*. Blackwell, Oxford
- Talbur S (2004) Time, space, and ethnography without proper subjects. In: Noblit G, Fores S, Murillo E (eds) *Postcritical ethnography*. Hampton, Cresskill, pp 107–123
- Tamboukou M (2008) Re-imagining the narratable subject. *Qualit Res* 8(3):283–292
- Thrift N (2008) *Non-representational theory: space/politics/affect*. Routledge, London
- Vadeboncoeur JA (2009) Spaces of difference: the contradictions of alternative educational programs. *Educ Stud* 45(3):280–299
- Valentine G, Skelton T, Chambers D (1998) Cool places: an introduction to youth and youth cultures. In: Skelton T, Valentine G (eds) *Cool places: geographies of youth cultures*. Routledge, London, pp 1–32
- Van Wolputte S (2004) Hang on to your self: of bodies, embodiment, and selves. *Annu Rev Anthropol* 33:251–269
- Willis P (1977) *Learning to labour: how working class kids get working class jobs*. Saxon House, Farnborough
- Youdell D (2006) Subjectivation and performative politics—Butler thinking Althusser and Foucault: intelligibility, agency and the raced-nationed-religioned subjects of education. *Brit J Sociol Educ* 27(4):511–528

Julie McLeod

Abstract

Reflecting on youth research in education, this response to McKenzie's chapter supports a more explicit and sustained engagement with issues of temporality in both research methodology and conceptual approaches to interpreting youth identity. The value of looking more historically at youth identity formation and identity practices is juxtaposed with the predominant focus on identifying and representing youth voice. It considers examples drawn from a qualitative longitudinal study of young people from the ages of 12–18 years, to suggest some of the inherent temporality of youth *becomings* and to briefly explore different metaphors for imagining youth identity formation. In particular the significance of the dynamic relationship between past and present, and between memory and narrative is discussed. This matter is explored further in reference to the experience of conducting oral history interviews for a history of adolescence – such interviews vividly expose the collision of temporalities in self making, and the powerful ways remembering and forgetting both make and undo narratives about the self, and about one's own personal and collective history.

Keywords

Youth research • Temporality • Oral history • Memory • Identity

Introduction

Marcia McKenzie's (2013) elegant meditation on educational research and the representation of youth provoked me to reflect on what it might mean for my own work to give a "better account for youth becomings as temporally, spatially, and socially constituted" (McKenzie, p. 308). A characteristic focus of much youth studies research is on recovering, giving voice to or representing the identity, views, aspirations and so forth of young people. And in the field of education this has commonly been aligned with a "rescue and transformation" agenda, as if the giving of voice stands in for a deeper engagement of politics and subjectivity. Pursuing youth voice has its

own dangers and seductions, as others (e.g. Fielding 2007), including McKenzie, have observed. Yet it remains a mainstay of youth research and indeed appears to be experiencing something of revival, part of, perhaps, a more widespread re-engagement with the phenomena of everyday life and a descriptive turn in empirical sociology (Savage and Burrows 2007). Framed by Judith Butler's calls for a necessary 'undoing of the self', this response urges us to 'undo' the usual representational terms and assumptions of youth research, with its promise of getting to know youth identity through voice and the tantalizing prospect of going to the heart of the problem through "a politics of representation concerned with more accurate truth telling" (McKenzie, p. 308).

J. McLeod (✉)
Graduate School of Education, University of Melbourne, Parkville,
VIC, Australia
e-mail: j.mcleod@unimelb.edu.au

Accounting for Youth

Against the lure of truth and voice, the motifs of history, identity and context have fuelled my research in youth studies. About 15 years ago, I began with a friend, Lyn Yates, a qualitative longitudinal study that followed young people as they moved through secondary school, from the age of 12–18 years (McLeod and Yates 2006). We wanted to understand how subjectivity was formed over that period, not as a linear model, not as expressed in unmediated ‘voice’, and not as revealed self-evidently in the unfolding truth students would tell us. Rather, the longitudinal design and the conceptual framing of the study was motivated by wanting to understand subjectivity in the *process of becoming* over time, interpreted in the accumulation and recursive stories of interview narratives, in the context of specific types of schools, and at particular historical moments. Our interests were biographical and sociological, and each had a comparative and an historical aspect. In other words, we wanted to compare whether and how identity was shaped by different (schooling) contexts, and to understand the intersection of biographical history and socio-cultural history. Thinking back on that study now, I still grapple with how we sought to account for youth subjectivity, the metaphors and methods that filled our notebooks, and I return especially to questions about history, memory and change.

Early in our longitudinal study, we began to work with the idea of identity as a kind of ‘magic writing pad’, drawing on Harriet Bjerrum Nielsen’s (1996) use of Freud’s metaphor. With this image the self was like a palimpsest upon which new inscriptions – experiences, discourses, cultural resources – are made. Each inscription leaves a mark on the page, an indentation on the soft wax block behind the paper. While the page is wiped and overlaid with new inscriptions, the older marks, even when erased, continue to leave traces – these accumulate into a less conscious yet more enduring record (McLeod 2000; McLeod and Thomson 2009). At the time, we were exploring and juxtaposing the different insights afforded by broadly socio-cultural and psychoanalytic conceptions of identity, and argued that this metaphor helped us to understand “intersections between life histories, narratives of the self, social practices, institutional effects and so on, and the relative impact of these “inscriptions” at different ages and stages. While still analysing subjectivity as produced and discourses as constitutive, it suggests a way of understanding how sociological and cultural practices, in conjunction with psychological and emotional processes, shape the formation of subjectivity over time” (McLeod 2000, p. 51). At the same time, the image of the magic pad suggests the co-existence of change and continuity – biographically and culturally. We seemed to move away from

this metaphor rather quickly – perhaps it began to seem too structuralist and static. But taking off from this, the idea of ‘over-writing’, of traces and smudges persisting, haunting and unsettling the present and unevenly moving into the future has stayed with me as a potentially rich way to think about identity and historical change.

In her text, McKenzie turns to questions about narrative, memory and oral history as offering other resources for building more situated accounts of youth voice. She refers as well to youth “constituted as subjects in relation to various contexts of culture and the everyday – for example in the historical sedimentation of everyday realities and places” (p. 3). I want to pause on the metaphor of ‘sedimentation’, which always makes me think of the samples of sedimentary rocks in school science classrooms, the layer upon layer of different colours and formations, sedimented, and seemingly fixed in place and chronological sequence. While the idea of sedimentation denotes the accumulation of effects and change over the long-term, it does not so nimbly evoke the dynamic and unpredictable interactions between past, present and future. In giving an account of history in the present, Harootunian (2007) argues that we inhabit a ‘collision of temporalities’, characterized by a ‘thickened present’, “a present filled with traces of different moments and temporalities, weighted with sediments”. These traces are like the ‘comets tail’, “of retentions that manage to maintain their identity long after the inaugurating event has passed.” History, he argues, is “the scene where the ghosts of the past commingle daily with the living . . . in a habitus of a haunted house” (pp. 477–78). Gothic gestures aside, Harootunian’s argument presents an interesting invitation to explore these colliding temporalities in contemporary youth studies research, a field which is predominantly presentist in orientation, despite youth identity typically positioned within a developmental and future oriented trajectory, and where the ‘past’ is too often construed as mere backdrop to what we do now.

These issues have become especially pressing for me as I begin a new cultural history of adolescence (1930s–1970s), a study that includes oral history interviews with former school students and teachers. In such interviews, the collision of temporalities is no simple abstraction, but a messy, rich, unsettling, embodied encounter with the specters of the past, and the complex psycho-dynamics of memory and story-telling in the present. The French oral historian Daniel Bertaux declared that “Our present *is* history” (1981, p. 35): the past is not a distinct temporal domain, cut off from the present, but is indissolubly connected to the present. Oral histories vividly expose the dynamics of past and present relations, and the powerful ways remembering and forgetting both make and undo narratives about the self, and about one’s own personal and collective history. “Past memories are always also personal constructions within the

present... In yet other ways, the present *is* history in how stories that are told and remembered today become future sources for understanding this present – a future past” (McLeod and Thomson 2009, p. 38). Youth studies research in the present might usefully engage with some of these insights, as a way of fostering a richer temporal sensibility – methodologically, conceptually and empirically – and of giving a situated account of the inherent temporality of youth *becomings*.

One story about the ‘spatial turn’ in the social sciences is that it represents a corrective to the predominance of interest in temporal processes. As Massey has argued, “space must be conceptualised integrally with time” (1994, p. 2). This is a challenge for youth research, as McKenzie explores, yet so too is developing robust and nuanced understandings of temporality: biographically and historically as well as methodologically and conceptually (McLeod and Thomson 2009). I am persuaded by the call for accounts that bring together the ‘spatial, temporal and social’ but wonder whether this could also, paradoxically, presage another kind of holism, as if with the aggregation of more and more dimensions we will end up with a comprehensive picture of youth identity – which is, I think, one of the enduring sub-plots of the youth-voice story. But of course, all accounts are partial, and even within that, some things escape, or exceed the limits of our frameworks and narratives; it’s knowing what we leave out, what we cannot see, why and with what effects that seems to matter more.

The closing invitation from McKenzie, following Butler, for researchers to “also ‘become undone’ – ‘to vacate the self-sufficient ‘I’ as a kind of possession” (p. 308) leaves open the question of what that might mean, but points us in the direction of considering our “investments and directions in educational research.” If we, as researchers, require a certain ‘undoing’ of positionality and subjectivity, and a reflexive account of our desires, then, a starting point for me is the desire to return to history and to historical thinking about ‘youth’. Inevitably, if we are undoing ourselves, this has a biographical element, but it also arises here from the play with history evident throughout McKenzie’s chapter, and its collision with my own struggles to understand youth, temporality and change.

Note on Contributor

Julie McLeod is Associate Professor in Curriculum, Equity and Social Change, Graduate School of Education, University of Melbourne. Her research interests include youth and gender studies, equity and education, curriculum history and feminism, and subjectivity and schooling. She is currently working on a cultural history of adolescence and schooling, 1930s–1970s. Recent publications include *Researching Social Change: Qualitative Approaches*, (2009 with R. Thomson); *Troubling Gender and Education* (2009, ed. with J. Dillabough and M. Mills); *Learning from the Margins: Young Women, Social Exclusion and Education*, (2007, ed. with A. Allard); and *Making Modern Lives: Subjectivity Schooling and Social Change* (2006, with L. Yates).

References

- Bertaux D (1981) From the life historical approach to the transformation of sociological practice. In: Bertaux D (ed) *Biography and society: the life historical approach in the social sciences*. Sage, London, pp 29–47
- Bjerrum Nielsen H (1996) The magic writing pad: on gender and identity. *Young J Nord Youth Stud* 4(3):2–18
- Fielding M (2007) Beyond ‘voice’: new roles, relations, and contexts in researching with young people. *Discourse Stud Cult Polit Educ* 28(3):301–310
- Harootunian H (2007) Remembering the historical present. *Crit Inquiry* 33(Spring):471–494
- Massey D (1994) *Space, place and gender*. Polity Press, Cambridge
- McKenzie M (2013) Beyond the giving and taking of accounts: time, space and the social in educational research with youth. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 301–310
- McLeod J (2000) Metaphors of the self: searching for young people’s identity through interviews. In: McLeod J, Malone K (eds) *Researching youth*. Australian Clearinghouse on Youth Studies, Hobart, pp 45–58
- McLeod J, Thomson R (2009) *Researching social change: qualitative approaches*. Sage, London
- McLeod J, Yates L (2006) *Making modern lives: subjectivity schooling and social change*. State University of New York Press, Albany
- Savage M, Burrows R (2007) The coming crisis of empirical sociology. *Sociology* 41(5):885–889

Towards Accountability and Responsibility: Meditations on Engaging the Uneven, Murky and Messy Path Towards Justice with Youth and Community

David Stovall

Abstract

The following vignette speaks to a number of approaches the research community should consider when engaging in matters of justice work with young people and community members. Critical to this process is the ability to recognize the struggles, contradictions and missteps we make in our attempt to remain accountable to student and community concerns. Our humility is the most important element in conducting engaged research.

Keywords

Youth • Community • Justice • Solidarity • Contradictions

Before I enter the bulk of my commentary, I think it is appropriate to applaud the efforts of Marcia McKenzie (2013) in her journey towards an often difficult truth in research with youth: research with young people and their communities means that we must come to grips with the fact that we don't know everything, we won't capture everything, and we still are delivering an interpretation. Time after time, qualitative research reminds us that we are not searching for objective "truths." Instead, our work is often a reflection of our struggles with the hard reality that our work may have missed the mark in our attempt to work in solidarity with said groups. In many cases, some of our most noted work speaks to the failures we had in our attempt to be responsible and accountable to young people and their communities. Simultaneously, we should be willing to embrace the idea that any type of engaged or activist research includes a messy path that is at minimum an attempt to speak to the issues of justice in these communities. For this reason, my meditations should be considered an attempt to push the boundaries of McKenzie's (and our own) work even more. In this attempt, I will speak to a number of approaches the research community should consider when engaging in

matters as serious as these. Still, my comments should not be read as something new. On the contrary, they should be considered reflective of my own humility and personal struggles to be explicit in naming purpose and direction in work aimed to stand in solidarity with youth.

In many instances I am chided by some in the research community for being too "simple" in my approach to research. Yet sometimes a simple question can lead us to the complexities, nuances, and particulars of our lives and the realities of young people and our communities. I always start with the baseline questions of "why?" and "for what?" From my high school students to my graduate students pursuing their doctorate, I push all of them to ask this question of their own work. If we do not, we can run the risk of making arrogant assumptions about the validity of our pursuits. Similar to Duncan-Andrade and Morrell's (2007) cycle of critical praxis (identify, research, apply, evaluate, reflect), the purpose of our work with youth should be identified from the outset and kept in mind throughout. Risking the chance of sounding redundant, I am going to go so far as to say that it is dangerous for us to think of research with youth and community as "research for the sake of research." Because the work we are engaging is directly connected to our lives and the lives of others, we have the responsibility to take it seriously. This does not mean that our work stands as the "end-all-be-all" in investigating the various dynamics and political systems that impact the lives

D. Stovall (✉)
College of Education, University of Illinois at Chicago,
Chicago, IL, USA
e-mail: dostoval@uic.edu

of youth and communities. Instead, our work is reflective of a larger human condition that needs to be challenged and changed if we are serious about supporting the ability of young people to make informed decisions.

Many of my colleagues often refer to issues of accountability and responsibility to young people and communities as *social justice*. For the purpose of this meditation, I want to broaden the concept to speak to the larger project of *justice*. I argue that justice should include the day-to-day processes and actions utilized by communities and concerned individuals to critically *examine and change* relations of power as it relates to race, class, gender, sexual orientation, disability and place through the development of concrete strategies *with* young people and the communities in which they come from. Because our training as researchers often pulls us away from using words like “concrete” or “tangible,” I’ve become gravely concerned with social justice becoming the “sexy” new paradigm to engage young people. As someone who engages the theoretical constructs of Critical Race Theory (CRT) (see also Leonardo 2013), transformative education, critical pedagogy, youth participatory action research (YPAR) and engaged scholarship, I often worry that such terms become the latest “flavour-of-the-month” referenced in every academic journal and edited volume, pointing to researchers’ claims that they are accountable and responsible to justice initiatives in under-served and under-resourced communities. That said, I am not proposing a set of “social justice” or “solidarity” standards in the work we do.

We can be proactive in our work with young people and communities as work that is done in solidarity *with* them. Solidarity, in its root definition, implies a struggle to create harmony within a group for the purpose of creating collective action. For these reasons I agree with McKenzie that we should not assume that because some of us researchers are “younger” or are considered “cool” by young people that we instantly have an “in” with them. We can never assume insider status because the lives and contexts of young people are constantly shifting. What was real to me as a young person may not be relevant to a young person today. In fact, I am constantly reminded by my high school students that the things I liked when I was their age are not the same. What they do say to me, however, is the fact that they appreciate my ability to share my stories with them. More importantly, they often reflect that what is most important to them is my ability to listen to them, while demonstrating that I take their suggestions and incorporate them into the next set of lessons we will engage. Personally it forces me to check in and challenge myself as I attempt to contribute to the historical record of research with youth. Additionally,

because we all were at one time young people and may have experienced repression and marginalization at the hands of adults and larger systems, we should constantly reflect on our capacity to engage youth, while minimizing our attempts to speak “for” them. I repeat - all attempts should be to speak “with” them.

Yet again, I want to be clear that the process of speaking “with” is not smooth. Over the last 7 years I’ve been working with community members in two communities in Chicago (Little Village and North Lawndale) to bring a high school to fruition. In the process, I have been challenged to create spaces that challenge me and the young people to analyze and propose tangible changes to how we currently envision education. This has led to me work in tandem with young people and community members to create a social justice high school with the aim of challenging the popular narrative that working-class/low income African-American and Latino/a youth should not have access to higher education. The journey has been a challenge in numerous ways. From teaching at the high school (in addition to my university responsibilities) to serving on the local school council to late-night meetings at the school to determine what courses will be taught in the next year, I find myself busy.

On the other hand, I also have to deal with reactions of some colleagues at the local and national level. Some in the academy say to my face (or behind my back) that I’m making a colossal mistake by “dedicating my time” to a place that doesn’t compensate me monetarily or allow me to conduct a longitudinal study. Another challenge is the reality of working in a large-scale public school system mired in budget cuts and the moving targets of a rotating door of administrators and policies that have very little particular relevance to the lives of young people who are pushing to make change in their lives and the lives of their communities. I must say that despite the challenges, I am continually honoured and humbled to take part in the process of creating, developing, and maintaining an educational institution. And this firsthand and in-depth experience of the complexities of life in schools greatly enriches my research.

In doing educational work that engages youth and community, I think that we have to return to the essence of such work. We should be intentional about what we do and the reasons therein. Our work should reflect what we were trying to do, where the work shifted, and where our work went wrong. Failure should be considered part of our work, as it serves as a reflection and commitment to improve and push the paradigm forward. The implications of our work are critical in this day and age, when young people in many

cases are deemed disposable and incapable of changing the ways in which we think, talk, and act. Because I believe the opposite is true, I hope this meditation is reflective of the work facing researchers.

Note on Contributor

David Stovall, Ph.D. is Associate Professor of Educational Policy Studies and African-American Studies at the University of Illinois at Chicago. In addition to his university responsibilities, he is also a volunteer social studies teacher at Social Justice High School in Chicago, Illinois.

References

- Duncan-Andrade JMR, Morrell E (2007) *The art of critical pedagogy: possibilities for moving from theory to practice in urban schools*. Peter Lang, New York
- Leonardo Z (2013) *Dialectics of race criticality: studies in racial stratification and education*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 247–257
- McKenzie M (2013) *Beyond the giving and taking of accounts: time, space and the social in educational research with youth*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 301–310

Mark Mason

Abstract

This chapter considers some conceptual and methodological challenges that face researchers in their attempts to understand and to compare education across cultures. The two core sections respond to philosophical, anthropological and sociological questions associated with the conceptualization of culture, and to methodological questions associated with conducting international and comparative education research across cultures. Through analysis of the concept of culture and of its consequences – including a genealogy of culture, a deconstruction of ‘national culture’ both in modernity and in late modernity under conditions of globalization – and by consideration of the more thoughtful approaches to comparative methodology in the field, the chapter aims to contribute to further conceptual clarity and methodological rigour in this domain.

Keywords

Culture • Comparative education • International education • Research methodology • ‘National culture’

Introduction

Few would deny that cultural factors are associated with and influence many aspects of education and its research. In *Culture and Pedagogy: international comparisons in primary education*, Alexander (2000) goes so far as to say that:

Life in schools and classrooms is an aspect of our wider society, not separate from it: a culture does not stop at the school gates. The character and dynamics of school life are shaped by the values that shape other aspects of . . . national life. . . . Culture, in comparative analysis and understanding, and certainly in national systems of education, is all. (pp. 29–30)

But they are few bold researchers who, in describing a particular culture as compared to others, dare assert what these factors are. They face accusations of stereotyping, even to the extent of racism, of treating culture as monolithic, of

overstating its influence in a hybrid world characterized by complex interactions and influences. Accordingly most would probably flinch from claims about cultural influences with any degree of substance or specificity: these influences are notoriously difficult to isolate, and such assertions are often tenuous at best, given how easy it is to not only overstate the influence of a particular culture in an extraordinarily complex world, but simply get it wrong.

This chapter considers some conceptual and methodological challenges that face researchers in their attempts to compare education across cultures¹. As a common context for the goals and practice of research in education, the chapter’s two core sections respond to philosophical, anthropological and sociological questions associated with the conceptualization of culture, and to methodological questions associated with conducting international and comparative education research across cultures. I attempt to

M. Mason (✉)
Department of International Education and Lifelong Learning,
Hong Kong Institute of Education, Hong Kong
e-mail: mmason@ied.edu.hk

¹An earlier and substantially longer version of this chapter was published in Bray et al. (2007).

sketch a more nuanced understanding of culture than is evident in much contemporary educational research by considering the work of writers such as Johann Herder, Raymond Williams, Robert Bock and Stuart Hall. The methodological questions associated with cross-cultural educational research I address by reference to the work of writers such as Robert LeVine, Joseph Tobin and Robin Alexander. Through careful consideration of the concept of culture and of its consequences, and by discussion of the more helpful methodological approaches to this minefield, my aim is to contribute to further conceptual clarity and methodological rigour in this domain.

Robust inferences from international and comparative studies depend primarily on comparison between entities that are at minimum both identifiable and discrete. If it is from comparison between two cultures that we wish to draw robust conclusions, we should be able at least to identify each culture, and to be sure about what marks each as distinct from the other. Clear identification of a particular group, cultural or otherwise, requires the satisfaction at a demanding level of constraints with respect to its defining features. If we wished to claim, for example, that “Chinese learners invariably have a high regard for education” (see Lee’s (1996, p. 25) citation of the claims of Ho (1986) and Yang (1986)), we should bear in mind that a claim as strongly put as this implies that all members of this group display this feature, that this feature is logically therefore an essential attribute of the members of this group, which implies in turn that a high regard for education is a necessary condition for membership of the group described as Chinese. Comparison of this feature of this group of learners with another group or, more particularly, claiming “an invariably high regard for education”, or at least this degree of regard for education, as *unique* to Chinese learners implies that *only* Chinese learners have this degree of regard for education, which implies in turn that this degree of regard for education is *sufficient* condition for membership of the group described as Chinese.

Since it is probably impossible to satisfy these conditions, claims of this nature might not be justifiable to any meaningful extent: attention to this level of definitional constraint in international and comparative education research across cultures would accordingly increase degrees of rigour in the field. Comparisons of education across cultures are, after all, common. Two well-known examples are the cross-national studies of educational achievement conducted under the auspices of the IEA (International Association for the Evaluation of Educational Achievement) and PISA (the OECD’s Programme for International Student Assessment). Secondary analysis of these results frequently involves a challenging search for cultural factors associated with educational achievement – the immediately obvious first slippage being that from country to culture (and indeed, if the adjective

“cross-national” is used, from nation to country). The assumption that nation, country and culture are synonymous is of course simply wrong. To assume that culture is a monolithic and discrete entity is equally wrong. The image of the pith-helmeted anthropologist cutting his way through vast jungles and traversing formidably mountainous terrain to ‘discover’ a remote tribe utterly isolated in its valleys in order to record its attributes and practices has possibly skewed contemporary views of cross-cultural comparison more than is normally realized. Questions about the validity and reliability of anthropological perspectives on educational comparison across cultures underlie much of the discussion in this chapter. In a world where cultural isolation as per the mythic tribes of Borneo is increasingly impossible, anthropological notions of culture might not serve as well in comparative research across cultures as other perspectives on culture might. It would accordingly be fair to set down now that I argue in this chapter that it is to sociological understandings of the concept of culture that we should turn for a more appropriate construction of culture in all its complexity, in a world characterized by increasing instances of plurality and multiculturalism, and increasing degrees of interdependence, hybridity and complexity.

Conceptualizing Culture

Raymond Williams, acknowledged as one of Britain’s greatest historians and theorists of culture, asserts that “culture is one of the two or three most complicated words in the English language” (1985):

This is so partly because of its intricate historical development, in several European languages, but mainly because it has now come to be used for important concepts in several distinct intellectual disciplines and in several distinct and incompatible systems of thought. (p. 87)

A Genealogy of Culture

Williams tracks the “intricate historical development” of the term, noting its early uses were as, “a noun of process: the tending of something, basically crops or animals” (1985, p. 87). It was then extended by metaphor to the process of human development, as in Bacon’s “the culture and manurance of minds” (1605) and in Hobbes’s “a culture of their minds” (1651) (Williams 1985, p. 87). Habituation to and generalization of the metaphor contributed to the development of the term as an independent noun, “an abstract process or the product of such a process” (p. 88), but it was not common in the English language until the middle of the nineteenth century. While the ‘cultivation of the self’ might be especially familiar as a concept and value

to scholars of Confucian heritage, Williams points out that in eighteenth century England ‘cultivation’ and ‘cultivated’ “acquired definite class associations”: in her novel *Emma* (1816), Jane Austen mentions the “advantage[s] of discipline and culture” (1985, p. 88).

German borrowed the French *Culture*, spelling it *Kultur* and keeping its close association in French with civilization, both in the sense of the process of becoming civilized or cultivated, and in the Enlightenment sense which described “the secular process of human development” (p. 89). Critically, both for our purposes here and as far as the historical development of the term is concerned, in his unfinished *Ideas on the Philosophy of the History of Mankind* (1784–1791) the German philosopher Herder challenged the Enlightenment notion of a universal human development, writing of culture that “nothing is more indeterminate than this word, nothing more deceptive than its application to all nations and periods”. Herder was scathing of “the very thought of a superior European culture”, calling it “a blatant insult to the majesty of Nature” (cited in Williams 1985, p. 89). In this and in his rejection of the notion of a progressive and universal path of human development, Herder prefigured the late twentieth century postmodernists in their critique of Enlightenment notions of universality. As such he contributed substantially to the distinction between national and traditional cultures drawn by the Romantics, who can justifiably also be seen as early postmodernists in their critique of industrializing Europe, and in their praise of the newly-coined ‘folk-culture’, attacking “what was seen as the ‘mechanical’ character of the new civilization then emerging: both for its abstract rationalism and for the ‘inhumanity’ of current industrial development” (ibid.). This use of ‘cultures’ in the plural was, according to Williams, Herder’s “decisive innovation”: not only “the specific and variable cultures of different nations and periods, but also the specific and variable cultures of social and economic groups within a nation” (ibid.). And at the same time, surely, was the impetus to compare between and among them born.

Apart, then, from the use of culture to describe “a general process of intellectual, spiritual and aesthetic development” (as in the examples cited from Bacon and Hobbes), the modern social sciences employ the term, in a line of reference that traces from Herder through Klemm’s *General Cultural History of Mankind* (1843–1852) and Tylor’s *Primitive Culture* (1870), commonly as an “independent noun, whether used generally or specifically, which indicates a particular way of life, whether of a people, a period, a group, or humanity in general” (Williams 1985, p. 90). But, Williams reminds us, “we also have to recognize the independent and abstract noun which describes the works and practices of intellectual and especially artistic activity: . . . culture is music, literature, painting and sculpture, theatre

and film” (ibid.). This third sense is of course an applied form of the first. If culture expresses so importantly the values of particular groups of people, Kluckhohn (1961) has suggested that it does this by responding to core human questions such as those about the character of human nature, the relationship of human beings to nature, the relationship of human beings to other human beings, and about the relationship of human beings to work.

Attempts to define a ‘true’ or ‘proper’ or ‘scientific’ sense of the term, suggests Williams (1985, p. 91), have taken its use in North American anthropology as the norm. This is of course somewhat arbitrary, and this arbitrariness lies partly behind my defence here of the use of contemporary sociological perspectives in comparing education across cultures, in preference to Vandra Lea Masemann’s (North American) anthropological perspective (2003). As we work towards an understanding of culture for comparative purposes, it is important to note, as Williams (ibid.) points out, that

in archaeology and in *cultural anthropology* the reference to culture or a culture is primarily to *material* production, while in history and *cultural studies* the reference is primarily to *signifying* or *symbolic* systems. (p. 91)

In comparing education across cultures we cannot of course avoid the study of both material production and symbolic systems. The curriculum is a good example of both material artifact and symbolic system, as would be education policy, pedagogical materials, and so on.

We should note also the field of symbolic (as opposed to cultural) anthropology and its primary focus on signifying systems (as in cultural studies). A key text here is Roy Wagner’s (1981) *The Invention of Culture*, which makes the important point that culture is not a fixed entity that shapes the lives of the individuals who share that culture: it is more accurate to speak of a dialectical process between people and their social environments which involves also the shaping of the culture by those people as they manipulate its conventional symbols to create new meanings. People who share a particular culture construct these terms, or symbols, and each gives a different meaning to people who share that culture. Culture is, in other words, not a club, along with membership of which go certain attributes of membership. Culture functions more as a productive force constituted by a relatively amorphous aggregation of loosely bounded factors that both influence the lives of the individuals who share in it and are influenced by those individuals.

From this we might summarize two definitions of culture that are of most interest to social scientists. The first, commonly understood as the anthropological definition of culture, indicates, as mentioned above, “a particular way of life, whether of a people, a period, a group, or humanity in general” (Williams 1985, p. 90). These ways of life would include the shared values and meanings common to

members of these groups. Drawing on Keesing's position that culture is "concerned with actions, ideas and artefacts which individuals in the tradition concerned learn, share and value" (1960, p. 25), Masemann's anthropological approach to culture (2003) assumes that

culture refers to all the aspects of life, including the mental, social, linguistic and physical forms of culture. It refers to ideas people have, the relationships they have with others in their families and with larger social institutions, the languages they speak, and the symbolic forms they share, such as written language or art/music forms. It refers to their relationship with their physical surroundings as well as the technology that is used in any society, [and] ... it expresses the value system(s) of a particular society or group. (pp. 116–117)

The second definition of culture derives from its anthropological definition, and also refers to shared meanings within groups, but differs in emphasis from the former by focusing more on "the symbolic dimension, and on what culture *does* rather than what culture *is*" (Bocock 1992, p. 232). Here, in cultural studies (more than in cultural anthropology), culture is less importantly a distinctive way of life as understood, for example, by its material artifacts, and more importantly "the set of practices by which meanings are produced and exchanged within a group" (ibid., p. 233). At the heart of these practices lies language, because it is the sharing of a common language system that enables people to communicate meaningfully with one another: "when a group shares a culture, it shares a common set of meanings which are constructed and exchanged through the practice of using language" (ibid.). Language is here understood very broadly, to include all sign and symbol systems through which meaning is produced: "any system of communication which uses signs as a way of referencing objects in the real world; it is this process of *symbolization* which enables us to communicate meaningfully about the world" (ibid.).

These sign and symbol systems are most commonly understood as the words of a language, but they include material objects as well. It is not least in the interpretation of the significance of the material object that this symbolic understanding of culture differs from, or at least extends, the anthropological understanding of culture. The uniforms that children wear to school, or, if uniforms are not required, the clothes that they choose to wear to school, with or without the logos of different fashion brands, all function as 'signs' in that they express meaning (Bocock 1992):

There is a language of dress, of fashion, of appearance, of gestures, as there is a language for every other social activity. Each is a means of communicating meaning about this activity and the activity could not exist, as a social practice, outside of meaning. Thus every social activity has a *symbolic* dimension, and this dimension of symbolization and meaning is what [in cultural studies, more than in cultural anthropology] we mean by 'culture'. . . . Cultural practices are meaning-producing practices, practices which use signs and symbols to 'make meaning' – hence, they are often described as *signifying practices*. (p. 233)

In cultural anthropology, then, culture is understood as "shared meanings and ways of life"; in cultural studies and its associated fields, culture is understood as "the practices which produce meaning" (Bocock 1992, p. 234). Again, the second draws on the first, and the first is interested also in the concerns of the second. It is more a matter of difference in emphasis: in the first, on the substantive contents of culture as a whole way of life; in the second, on the ways in which cultural practices produce meaning for those who share those practices. The approach to the analysis of culture typical of the second looks for the ways in which meaning is produced by "the arrangement, the pattern, the symbolic structure of an event" (ibid., p. 235): hence the related term, *structuralism*.

'National Culture' in Modern Societies

Perhaps the most common expression of cultural identity in modernity is to be found in what is commonly understood as 'national culture'. In pre-modern societies, cultural identity is typically constructed in terms of one's tribe, 'people', religion, or region. With the nation-state the dominant political entity in modernity, these identities have in modern societies gradually given way national cultural identity. 'Nation' (as in national, associated with a country) and 'culture' are, after all, often conflated in international and comparative education research that attempts to identify the 'cultural' factors that might contribute to, say, successful educational outcomes. The question then becomes, what is national culture?

Here I follow Stuart Hall (1994, p.292), for whom a national culture is a *discourse* – "a way of constructing meanings which influences and organizes both our actions and our conception of ourselves". National identity, argues Benedict Anderson (1983), is no more than an "imagined community". That does not mean that national identity and culture have no consequences in the real world. The consequences, as we shall see, are real and far-reaching. It also means that before international and comparative education researchers undertake comparisons across cultures, they would do well to consider not only the ways in which the discourse of national culture is represented, but also the power of those representations to win the national allegiance and to define the cultural identity of its subjects. Here I use the term *subject* in a Foucauldian sense, where the modern subject is understood to be both the originator or the 'subject' of reason and rationality (as understood in Enlightenment terms), of knowledge, and of practice, institutional and otherwise; and the 'subject of', or 'subjected to', these practices in the sense of bearing their consequences (see Foucault 1982; Olssen 2013; Fejes 2013; Hodgson 2013). While the Enlightenment may have constructed the

modern subject as newly freed by liberalism and democracy from the bonds of economic and political feudalism, and by reason from the blinkers of a revelatory epistemology rooted in religious superstition, the point of Foucault's critique is that the modern subject has not escaped the consequences of power and authority. Such an ideal is illusory: power runs everywhere, through the tiniest of capillaries. While we are indeed the authors of the representations that constitute the discourse of national culture, we are at the same time subject to the power of those representations to define our cultural identity and our allegiance to an imagined national community.

We should remember at this point that we are focussing our discussion here on national culture and identity, as this has been of particular interest to international and comparative education researchers. There are, however, many other 'imagined cultural communities' and cultural identities of interest. The so-called 'fragmented and de-centred subject'² of late modernity is constituted by many cultural identities and is the subject of (in both senses of the phrase) many cultural discourses. I will suggest that as a consequence of

² Why 'fragmented' and 'de-centred'? While in Enlightenment thought the rational individual is (newly) sovereign, the centre of conscious volition and the originator of a coherent set of intentions, recent developments in social theory have challenged this view, suggesting a 'de-centred' and 'fragmented' self that is far less sovereign than the Enlightenment perspective might have held. It was of course the Enlightenment view that individuals could be freed by reason from ignorance and religious superstition, and thus take sovereign control over their lives. In addition to Foucault's perspective which I considered in the paragraph preceding this footnote, I summarize here three further perspectives from late modernity that challenge this view.

First, the Marxist structuralist Louis Althusser (1966/2003) argued that the self is by no means sovereign because the power to effect change lies in the material circumstances bequeathed to us by history. In this he reiterated the view of Marx (especially in his later work) encapsulated in *The Eighteenth Brumaire of Louis Bonaparte*: "Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past" (1852/1984, p. 15).

Second, the psychoanalytic thinker Jacques Lacan (1977) developed further the ideas of Freud, reiterating that what we think of as the sovereign, conscious, autonomous self is far more influenced by unconscious psychic process than, say, humanist psychologists such as Carl Rogers might have argued. Identity, in Lacan's view, is anything but innate, fixed, or centred in the conscious self: it is continually being formed and reformed over time through unconscious processes.

Third, the philosopher of language Jacques Derrida (1981) pointed out that individuals are not freely able to fix meaning in the language they use. Instead, their linguistic expressions are bound by their language, which provides a pre-existing structure within which their thoughts and intentions are formed. In this Derrida drew on the work of the structural linguist, Ferdinand de Saussure. Agency, in this perspective, lies not in individuals, because, bound by their linguistic structures, the rules of their language, and the unstable systems of cultural meanings within which they are enmeshed, they cannot be sovereign 'authors' of their statements: hence the term *structuralism* and the debate with *agency* theorists about the drivers of social change.

the processes associated with globalization, national cultural identity has been reduced in significance to just one of many cultural discourses that constitute the individual in late modernity. National cultural identity has nevertheless been among the most powerful of these discourses in modern society.

What, then, is national cultural identity? Hall (1994) points out that

national identities are not things we are born with, but are formed and transformed within and in relation to *representation*. We only know what it is to be 'English' because of the way 'Englishness' has come to be represented, as a set of meanings, by English national culture. It follows that a nation is not only a political entity but something which produces meanings – a *system of cultural representation*. People are not only legal citizens of a nation; they participate in the *idea* of the nation as represented by its national culture. A nation is a symbolic community and it is this which accounts for 'its power to generate a sense of identity and allegiance' (Schwarz 1986, p. 106). . . . National cultures construct identities by producing meanings about 'the nation' with which we can *identify*; these are contained in the stories which are told about it, memories which connect its present with its past, and images which are constructed of it. (emphases original) (pp. 292–293)

National culture emerged with and helped to shape modernity by gradually displacing (but of course not entirely so) pre-modern discourses of identity that I mentioned earlier: tribal, ethnic, religious, regional. The ascendancy of national cultural discourses was heightened by the nation-state's establishment of a common language and a national education system that ensured, or at least aimed to ensure, universal literacy in that (now national) language, and by the establishment of national cultural institutions in the form of museums, performing arts theatres, architectural icons whose historical and political significance was represented in the discourse, such as palaces, castles, and parliamentary and judicial buildings, and latterly, national sports teams and consumer brands marketed with a national identity.

What are the origins of these representations that constitute and reflect the discourse of national culture? For Homi Bhabha, "Nations, like narratives, lose their origins in the myths of time and only fully realize their horizons in the mind's eye" (1990, p. 1). There are many ways in which the narrative of national culture is constructed:

- through "the narratives of the nation, as it is told and retold in national histories, literatures, the media and popular culture", which "provide a set of stories, images, landscapes, scenarios, historical events, national symbols and rituals which stand for, or represent, the shared experiences, sorrows, and triumphs and disasters which give meaning to the nation" (Hall 1994, p. 293), and which "make up the threads which bind us invisibly to the past" (Schwarz 1986, p. 155);
- through the emphasis on "origins, continuity, tradition and timelessness" (Hall 1994, p. 294), which represents

national identity as primordial, “in the very nature of things” (Gellner 1983, p. 48);

- through the invention of ‘tradition’: as Hobsbawm and Ranger (1983, p. 1) point out, “traditions which appear or claim to be old are often quite recent in origin and sometimes invented”;
- through the creation of a “foundational myth”, one which “locates the origin of the nation, the people and their national character so early that they are lost in the mists of, not ‘real’, but ‘mythic’ time” (Hall 1994, p. 295; Hobsbawm and Ranger 1983, p. 1); and
- through the symbolic grounding of national identity on the idea of a “pure, original people or ‘folk’” (Hall 1994, p. 295; Gellner 1983, p. 61).

My point in drawing on Hall, Schwarz, Gellner, and Hobsbawm and Ranger to expose national cultural identity as more constructed than ‘natural’, more discursive than material, is to offer a caution to international and comparative education researchers about the shallowness and the arbitrariness of the ‘foundations’ of cultural identity. If a good first step in any comparative research is to isolate and define the entities being compared, the unit of comparison, it should be realized that the ‘unit’ of culture is one of the most difficult to identify and operationally describe. This is not to say that cultural identity isn’t very important and doesn’t have very real consequences; but inferentially locating the source of the significance of these consequences in culture is very difficult indeed.

Beyond these questions about the rather arbitrarily constructed history of national cultural identity is a further problem: whether national identities really are as unified, coherent, consistent and homogeneous as appears in these representations of ‘national culture’. This question is as important for any comparative education researcher attempting to draw inferences at national cultural level. The answer is that they are obviously not: “modern nations”, Hall (1994, p. 297) reminds us, “are all cultural hybrids”. Most modern nations were, after all, born out of violent conquest of one or more groups by another. National cultural identity is often constructed on a specious notion of race, marking as different those of different ‘racial groups’. National identity is also often strongly gendered, excluding women from its patriarchal norms. Class is another powerful divider, and it is almost without exception the cultural capital of the elite groups in a society that represents the norm, that constitutes what is to be emulated and sought by all. The generalisation of the cultural norms of a society’s elite groups to the level of ‘national cultural identity’ thus does what Bourdieu calls symbolic violence to the representations espoused in the cultural identity of other groups in society. Differences in language, geographical region, tradition, religion, customs, and the like constitute further lines marking difference and exclusion. While it is the task of

national cultural mythology to draw together the different identities and local communities of which a nation-state is constituted, “to make culture and polity congruent” under the same “political roof” (Gellner 1983, p. 43), and to paper over the cracks that divide those who identify with Anderson’s “imagined community” from those who are not subsumed under the state’s hegemony, it is clear that it is a brave researcher indeed who attempts to compare, say, South African cultural approaches to learning with, say, Nigerian, or Indonesian, or Chinese.

I have argued that ‘national culture’ is somewhat arbitrary, probably best understood as myth, and not particularly successful at masking deep and cross-cutting divisions in society. The process of globalization has muddied the waters even further. I turn now to consider the consequences of accelerated rates of globalization and the associated processes for national cultural identity. In a rather mixed geological metaphor, globalization has marbled what has been sedimented, layered, into the accepted truths of national cultural identity. The cultural hybridity of the modern nation-state, masked as a homogeneous unity by the myths of national culture, is exacerbated almost to the point of the displacement of the national culture by the processes of globalization. One of these involves the mass ‘unplanned’ migration, driven by the increasing gap in wealth between rich and poor that is the most stark of globalization’s consequences, of people from the previously colonized countries of the developing world to the countries of the developed world, frequently to the former colonial power. If there is a ‘national English dish’, whether it was roast beef and Yorkshire pudding, or pie and chips, by now it is probably curry and rice³. If national cultural identity has been about attachment to an imagined community constituted and represented by a shared sense of place, historical narrative and discursively constructed events and symbols, globalization is associated with, in part, a more universalist and deterritorialized form of identity.

If accelerated rates of globalization are about the diminishing importance of geographical constraints in defining the nature of economic, political, social and cultural interactions, or, more specifically, about the “deterritorialization of space” (Delanty 2000, p. 81), then cultures and civilizations are increasingly more exposed to each other, more likely to clash, or to merge, or to develop new hybrids or a universal culture, with as much impact on the local and specific as on the global and universal. It should be stressed, however, that globalization cannot be construed as leading to a global culture, other than perhaps the rule of the market

³ In response to the results of a popular survey of national foods in 2001 by Food Service Intelligence, the former UK Foreign Secretary, Robin Cook, declared chicken tikka massala “Britain’s true national dish”.

and its orientation towards global elites as a consequence of the transnationalization of capitalism. Most of the literature points to increasing diversity and fragmentation as well as to increasing homogeneity.

What is of most interest for our purposes here are three processes associated with accelerated rates of globalization: first, national cultural identities are being rendered yet more tenuous than they already are; second, local and particular identities are being strengthened as a consequence of resistance to the processes of globalization; and third, these new hybrid identities are becoming, at the expense of national cultural identities, increasingly visible. Perhaps the main point to be taken from the discussion of the preceding pages is that the anthropological definition of culture starts to look methodologically suspect in all but the most homogeneous and isolated of cultures, if indeed any exists anymore. As I have suggested, it is perhaps to cultural studies and to sociological more than anthropological understandings of culture in contemporary society that we need to turn in our efforts to compare education across cultures.

At the same time, I should add a word of caution: for all that I have said about the virtual impossibility of talking about a 'culture' anymore, I am forced to use this term in what follows, for want of any other more appropriate and succinct terminology. Readers should perhaps, every time they read the word "culture" in what follows, read it inside imagined scare quotes, as 'culture'. In order to escape the false and falsely packaged baggage that comes with "culture", I have accordingly tried where stylistically appropriate in what follows rather to use "cultural context".

Comparing Education Across Cultures

Our second major question has to do with how we might set about comparing education across cultures. How, in short, do we isolate the particular influences of culture in attempting both to explain institutions, arrangements and practices in education and to compare these with education in other societies?

Comparative research into the institutions and practices of education across cultures faces a problem commonly faced by ethnographic researchers: the problem of context. For international and comparative researchers trying to identify the consequences of culture for education, the problem I have been indicating for much of this chapter thus far is, in many senses, one of context: what is the cultural context that produces the educational institutions and practices under study? Martyn Hammersley (2006) asks two questions of central importance to ethnographers: "how are we to determine what is the appropriate wider context in which to situate what we are studying?" and "how are we to gain the knowledge we need about that context?" (p. 6). Can this

wider context be limited to local cultural context? My arguments have indicated the limitations of this view of culture. Can it be isolated in terms of a national cultural context? I have suggested the virtual impossibility of this view of culture, given the influence of the processes associated with globalization in rendering, as I indicated above, national cultural identities yet more tenuous than they already are, and in contributing to the increasing prevalence of culturally hybrid identities. And yet to give up and speak only of a 'globalized cultural context' is to ignore ways in which, as I have also indicated above, local and particular identities have been strengthened in resistance to the processes of globalization. Perhaps more importantly, it is also to give up in the search for truths about the consequences of culture for education that are both evident to many and productive of interesting insights about education across cultural contexts.

With reference to his first question, Hammersley (2006) asks a further question that reflects a central purpose of my analysis and deconstruction of culture thus far: "whether context is discovered or constructed; and, if it is constructed, whether it is constructed by the participants or by the analyst" (p. 6). I have argued in this regard that culture, or cultural context, is best understood in terms of what it *does*, rather than what it *is*; and that culture influences people as much as they shape culture. Hammersley points out one ethnographic approach to (cultural) context which argues that "it is generated by the people being studied, so that the analyst must discover and document context as this is constituted in and through particular processes of social interaction" (ibid.). Proponents of this approach would suggest that any attempt by researchers to impose their analytical frameworks onto the cultural meanings generated by the population under study would be an act of symbolic violence. Hammersley's response would be to ask "whether it is the case that people always explicitly indicate the context in which they see themselves operating", and "whether it is right to assume that people know the context in which their activities can best be understood for the purposes of social science explanation" (ibid.). For example, in the context of education under Apartheid in South Africa, would white South Africans in the city of Bloemfontein have limited the cultural context of their educational institutions and practices to white Afrikaner nationalist schools for white Afrikaans speaking children, or would they have understood their cultural context to include schools for black children in the poverty-stricken townships in the peripheral areas of that city, on whose economic deprivation the luxuries of white schooling depended? From a Marxian (see Sharp 1981) or neo-Marxian critical perspective, such as that associated with the Frankfurt School (see Mason 2010), ethnographic research typically focuses on local and surface events that are merely symptomatic of or consequent on deeper and

more powerful structural forces, especially economic and political factors, that shape these ultimately ‘superstructural’ institutions and practices. More recently, Burawoy et al. (2000) have argued in a vein similar to that which I have pursued here: that the wider context of ethnographic research has to be understood in terms of the processes associated with increasing rates of globalization.

With reference to his second question, “how are we to gain the knowledge we need about . . . the appropriate wider context in which to situate . . . the local phenomena [which] we are studying?” (2006, pp. 6–7), Hammersley wonders whether ethnographic research might best rely on existing social theory, or be integrated with “other kinds of social science research that are better suited to studying whole institutional domains, national societies, and global forces” (p. 7), cautioning at the same time that this could constrain the generation of grounded theory. The integration of research across cultures with contemporary social theory is certainly what I have been implying in this chapter. This of course raises questions about which social theoretical perspective might best inform comparative education research across cultures. Ethnographic research has commonly been informed by several different approaches, including functionalist, structuralist, symbolic interactionist, and conflict or critical (whether Marxian, neo-Marxian, feminist, or otherwise) perspectives. The choice between them is in my view best based less on evidence (on what evidential basis would researchers make sound choices?), and more on the researchers’ value commitments in doing the research (see Sikes et al. 2003). Researchers might, for example, be committed to educational equity and equality, and would then seek to ascertain in their ethnographic research the axes along which educational goods are differentially distributed. Masemann’s position with respect to which theoretical perspective most appropriately situates ethnographic research in its wider context is located in the paradigm of conflict theory. Calling for a “critical ethnography” (an anthropological methodology informed by critical theory) that eschews “the assumptions of neutrality and objectivity of functionalist [and] positivist approaches” (2003, p. 128), she suggests that

although the ethnographic approach is necessary to explore the workings of culture in the classroom, school and administrative system, it should not constrain the researcher mainly to phenomenological approaches or ones in which the focus is only the subjective experience of the participants: . . . a critical or neo-Marxist approach is necessary to delineate the connections between the microlevel of the local school experience and the macrolevel of structural forces at the global level that are shaping the ‘delivery’ and the experience of education in every country in even the most remote regions. (p. 115)

I should acknowledge here that I am twice in agreement with Masemann: that comparative education research into culture not be restricted to phenomenology but be situated in

a wider context of social theory; and that the most productive and morally justifiable theoretical perspectives are in the domain of conflict and critical theory. Masemann (2003) draws on Durkheim and on Bernstein to defend this position:

It is the social class position of students that ultimately determines how they experience any form of pedagogy. The seeming variations in values are not merely cultural but are class based. Thus, the link is made between education, culture, and class in every society. . . . [Children’s] experience of and reactions to their education are not grounded only in culture and values that are perceived in the liberal tradition as unconnected to the material basis of their society (the world of work): . . . these experiences are fundamentally shaped by the economic basis of their neighbourhood, community, region, or country, and ultimately the global economy. (p. 120)

I should also note here that it would be a mistake on the part of ethnographic researchers to assume that in their inductive generation of grounded theory from their empirical observations they were able to proceed a-theoretically in the first instance, as if they were able to enter their chosen site of study without any theoretical framework to ‘bias’ them (cf. Lauder 2013). As John Berger claims in his classic *Ways of Seeing* (1972, p. 8), “the way we see things is affected by what we know or what we believe”. To put it more bluntly, we cannot see without theory.

But if researchers need a theoretical perspective in order to select and to interpret what they see, and if the choice of theoretical perspective is ultimately grounded in researchers’ value commitments, researchers need also to be aware of the risk of systematic bias (see Bridges 2013). Perhaps researchers cannot get away from what Hammersley sees as the inherent tensions in ethnographic research “between trying to understand people’s perspectives from the inside while also viewing them and their behaviour more distantly, in ways that may be alien (and perhaps even objectionable) to them” (2006, p. 11). Dealing with this tension methodologically is one of the challenges we face in this chapter, and one to which I shall shortly turn my attention.

An associated risk lies in the potential failure by researchers to recognize their own ethnocentric perspectives, against which Hofstede (2001) warns. It is not only that instruments need to be developed cross-culturally.

Novice researchers often focus only on their own culture and judge . . . from this culture’s point of view and value system. They recognize only the issues considered relevant in their own society and ignore or consider taboo issues that may be relevant in other societies. In this way they miss precisely the culturally essential issues. (p. 464)

In the same vein, Wagner (1981, pp. 2–4) cautions in *The Invention of Culture*, to which I alluded earlier, that

since we speak of a person’s total capability as ‘culture’, the anthropologist *uses his own culture to study others*, and to study culture in general. Thus the awareness of culture brings about an important qualification of the anthropologist’s aims and

viewpoint as a scientist: the classical rationalist's pretense of absolute objectivity must be given up in favour of a relative objectivity based on the characteristics of one's own culture. It is necessary, of course, for a research worker to be as unbiased as possible insofar as he is aware of his own assumptions, but we often take our own culture's more basic assumptions so much for granted that we are not even aware of them. Relative objectivity can be achieved through discovering what these tendencies are, the ways in which one's culture allows one to comprehend another, and the limitations it places on this comprehension. (emphasis added, p. 2) ...

The idea of 'relationship' is important here because it is more appropriate to the bringing together of two equivalent entities, or viewpoints, than notions like 'analysis' or 'examination', with their pretensions of absolute objectivity. (p. 3)

The only way in which a researcher could possibly go about the job of creating a relation between such entities would be to simultaneously *know* both of them, to realize the relative character of his own culture through the concrete formulation of another. ... We might actually say that an anthropologist 'invents' the culture he believes himself to be studying, that the relation is more 'real' for being his particular acts and experiences than the things it 'relates'. ... It is only through 'invention' of this kind that the abstract significance of culture ... can be grasped, and only through the experienced contrast that his own culture becomes 'visible'. In the act of inventing another culture, the anthropologist invents his own, and in fact he reinvents the notion of culture itself. (emphasis original, p. 4)

Apart from the importance of researchers' needing to be aware of their own cultural biases and ethnocentric viewpoints, they should be mindful of their own ethical and more broadly axiological positions. They would do well to remember that the deontological approach to values and morality, with which is associated the duty to uphold what is universally and transcendentally right, is best suited to studies in ethics and theology. Comparative research across cultures involves not deontology but phenomenology, the philosophical approach that is concerned to understand the world through the eyes of and as it is experienced by others. Phenomenological studies of values require researchers to bear in mind and to take methodological steps to counter as far as possible the fact that their values will to a significant extent shape their perceptions and observations, their descriptions and classifications, their conceptualisations, inferences, conclusions and predictions.

Researchers need also to be aware of the ways in which their language helps to shape their view of reality. We need not accept the Whorfian hypothesis (1956) in its strong sense that language shapes worldview, nor need we accept the view from some corners that 'language is culture' and 'culture is language', to realize and accept that our linguistic background has some influence on the ways in which we perceive phenomena. Translation of instruments and from transcriptions add another level of complexity to this question, as is repeatedly acknowledged by Alexander (2000) in his studies of pedagogy across cultures that required translation from French, Russian and (occasionally) Hindi. As Hofstede (2001) cautions, "the translator is the first exponent

of the foreign culture in the research process, and the impact of culture on our findings starts in the translator's mind" (p. 21). Back-translation offers, of course, one way of checking the accuracy and equivalence of translations.

Hofstede's *Culture's Consequences: comparing values, behaviours, institutions and organizations across nations* (2001) is a landmark in the field of comparison across cultural contexts, and probably no discussion of the field would be complete without reference to it. More importantly for our purposes, he flags a number of potential pitfalls for researchers in the domain. "Confusing cultures with individuals", he cautions, "is the first pitfall of cross-cultural research, especially tempting to psychologists from individualist countries" (p. 463). "Cultures are not king-size[d] individuals: they are wholes, and their internal logic cannot be understood in the terms used for the personality dynamics of individuals" (p. 17). Importantly with reference to our earlier discussions, he warns against confusing national culture with other levels of culture, such as ethnic or regional cultures (p. 464). It would be a naïve researcher indeed who tried to compare, say, cultural approaches to learning in the UK with those in south Asia. It makes more sense to compare, say, cultural approaches to learning in the Pakistani immigrant communities in the industrial cities of central England with those of traditional Pakistani communities in rural North Waziristan. As Mark Bray has stated explicitly in his contribution to this volume, defining and refining the unit of analysis is critical. It is possibly even more so in the notoriously intractable domain of culture.

Methodological Approaches to Comparing Education Across Cultures

In *Culture and Pedagogy: international comparisons in primary education*, Robin Alexander (2000) undertook a comparative analysis of primary education in five countries – England, France, India, Russia and the USA – which "exhibit marked contrasts in respect of their geographic, demographic, economic and cultural characteristics, while sharing a formal constitutional commitment to democratic values" (p. 4). In focusing on "educational policies and structures on the one hand and school and classroom practices on the other", he aimed to "unravel further the complex interplay of policies, structures, culture, values and pedagogy" (ibid.). In doing so, he cautions that "nobody embarking on a study of education in countries and cultures other than their own does so ... without being acutely aware of how little ... they end up knowing": ... "there is the constant spectre of seeming naïve, presumptuous or simply too tidy in the face of what even insiders find baffling or contrary". What is most elusive in this, he suggests, is how "the practice of teaching and learning ... relates to the

context of culture, structure and policy in which it is embedded” (p. 3).

Methodological thoroughness and the comprehensive gathering of data from as many sources as possible clearly underlie Alexander’s success in withstanding accusations of naivety, presumptuousness or tidiness to the point of simplicity:

Data were collected at three levels, the system, the school and the classroom, using a mixture of interviews, semi-systematic observation and – for later transcription and analysis – videotape and audiotape. These data were supplemented by school and country documentation, photographs and daily journal entries. (p. 4)

In addition, Alexander (2000) makes an interesting point about how the number of cultures, or countries, selected for study can have an influence on the nature of the conclusions drawn. Why should he have chosen five countries, rather than the more typical study that compares just two?

To compare two drops us into the polarizing mindset from which it is hard to escape. To compare three invites what Tobin (1999) calls ‘the Goldilocks effect’ (in respect of primary education this country is good, this one is bad but this one is just right). To compare five is more difficult but has the vital advantage of enabling one to present similarities and differences as continua rather than as poles. And if the five are sufficiently diverse it makes the uncovering of educational universals . . . a realistic pursuit. (p. 44)

In his seminal paper on the use of “outsiders’ judgements” in culture studies, Robert LeVine (1966) points out the importance of the convergences that emerge from analysis of the views that members of different groups have about the particular culture under study. In the attempt to approximate truth in judgements across cultures, LeVine’s concern is to enhance validity by this method of triangulation. Tobin et al. (1989) make use of LeVine’s ideas in their methodologically (and otherwise) illuminating study of “preschool in three cultures”, and education researchers undertaking comparative studies across cultures would be hard pressed to find a better methodological model to guide them. Tobin et al. (1989) set out to study “not only three cultures’ preschools but also three cultures as seen through their preschools” (p. 2): Japan, China and the USA⁴. Following LeVine, they sought a “multivocal ethnography” (p. 4) in order to enhance by triangulation the validity of their conclusions about preschools in those three societies. This multivocal ethnography included

the voices of preschool teachers, parents, and administrators, who tell their own stories, creating their own texts (produced as descriptions of a videotape of the preschools under study in their and other societies) that discuss, deconstruct, and criticize [the researchers’] account of their schools. Each of these texts reacts to earlier texts while never entirely replacing, subsuming, or negating them. (pp. 4–5)

Tobin et al. thus attempted to balance their judgements as anthropological researchers with those of ‘cultural insiders’ and other ‘cultural outsiders’.

What the researchers chose to videotape in their visual ethnography of the preschools under study was the result of discussions between them and their hosts, “a compromise between what [they] had come to the field hoping to film and what [their] hosts felt was important and appropriate for [them] to see” (p. 5). In this, the researchers remind us (ibid.) that

what preschool teachers, administrators, parents, and children feel free to say to visiting anthropologists is itself largely culturally determined. Notions of what it means to speak honestly, of what to show and say to a guest, of how frankly to criticize oneself and others vary widely from culture to culture and reflect changing political climates.

Tobin et al. point out that this multivocal ethnography was needed to provide different perspectives on their very ways of seeing, on their culturally biased selection and focus in the act itself of videotaping the three preschools. They realized after their recording that when American members of their team were filming, they tended to focus more on individual students in the classroom; when Chinese researchers were filming, they tended to pan more across large groups of students. The result, they acknowledge, was “three videotapes that are very subjective, idiosyncratic, culture-bound” (1989, p. 7). I quote Berger from *Ways of Seeing* (1972, p. 8) again: “the way we see things is affected by what we know or what we believe”.

Following their filming of three preschools in three cultures (which constituted the record of their primary [outsiders’] observations as ethnographic researchers), Tobin et al. (1989) sought a second narrative to lend perspective to their first, filmed, narrative: “[primary] insiders’ explanations” (p. 7) – “Japanese, Chinese, and American preschool administrators’, teachers’, parents’ [and children’s] explanations of and reactions to the videotapes [the researchers] shot in their schools”. Audiences were asked to view the tapes of their preschool and to provide a running commentary – in the sense of both a narrative and an analysis – of their actions depicted in the tapes.

The researchers then sought a third narrative in their multivocal ethnography: (secondary) insiders’ explanations that might address the perennial problem of typicality: how representative, they asked other audiences associated with preschools in the same country, is this preschool of others in your society, and how atypical is it? Alexander (2000) refers

⁴ Tobin has since added the dimension of comparisons across time with his recent study, *Preschool in Three Cultures Revisited: China, Japan and the United States* (2009). Interested readers would do well to consult this volume with regard to the complexity of historical comparison.

to the problem of the “‘typicality’ of data which emphasize depth of focus rather than breadth” as one of the “more intractable problems of this kind of study” (p. 5). To render this problem more tractable, Tobin et al. typically asked their third narrative participants, after they had viewed sections of the videotapes (made in the school in their own society) showing teachers dealing with issues involving discipline, questions such as, “Were the teachers too strict, just right, or not strict enough?” (Tobin et al. 1989, p. 9). The researchers presented the results of this third narrative both statistically (using ratings sheets for responses to questions such as this one about degree of strictness) and descriptively (using questionnaires that solicited respondents’ views about the purpose of preschools in a society, what children should learn in preschool, the characteristics of a good preschool teacher, and the like). These third narratives, of secondary insiders, contextualize and provide a further perspective on the first narratives of the researchers, whom we might refer to as the primary outsiders, and on the second narratives, of the primary insiders. This strategy serves to give comparative education researchers a better sense of the degree of homogeneity and of the range of differences in practices and beliefs associated with an institution or social arrangement in a particular society.

With respect to this problem of typicality, Alexander locates the strength of the methodology employed by Tobin et al. in its ability to render inferences about what cultural values, ideas and experiences lay beneath observed practices by accepting that culture is an integral part of, rather than an extraneous factor contributing to, what goes on in schools and classrooms. Referring to their observations in a pre-school in Japan, Alexander (2000) stresses that what their methodology enabled them to do was to establish the authenticity of the observed practices as distinctive (and indeed typical) of pre-schools in that country. The problem of typicality was approached, in other words, by assessing the extent to which observed practices were authentically distinctive through their seeking of first, second, third and fourth narrative perspectives from primary and secondary insiders and outsiders:

The practices this particular research team witnessed and reported in Kyoto were certainly not identical to those in a nursery school down the road, let alone two hundred miles away, but their authenticity as distinctively and indeed typically Japanese pre-school practice stemmed from the extent to which any surface differences were outweighed by deeper and more abiding similarities which had their roots in the ideas, values and experiences which teachers, parents and children at the schools had in common – ideas, values, and experiences which the researchers’ painstaking close-up methodology enabled them to explicate and examine in the round. (p. 267)

Approaching the problem of typicality by rendering a particular case insightful depends, says Alexander (2000),

on two propositions, both of which are implicit in the previous paragraphs:

First, we must accept the proposition that the culture in which the schools in a country or state are located, and which its teachers and pupils share, is as powerful a determinant of the character of school and classroom life as are the unique institutional dynamics, local circumstances and interpersonal chemistries which make one school or classroom different from another. For culture is not extraneous to the school, nor is it merely one of a battery of variables that can be tidily stacked to await correlational analysis. Culture both drives and is everywhere manifested in what goes on in classrooms, from what you see on the walls to what you cannot see going on inside children’s heads. (p. 266)

Alexander’s (2000) second proposition, so ably demonstrated in both his and in Tobin’s study, is that “the research methods used [should be] sufficiently searching to probe beyond the observable moves and counter-moves of pedagogy to the values and meanings which these embody” (p. 266).

Following LeVine’s ideas on “outsiders’ judgements” (1966), Tobin et al. then sought a fourth narrative perspective by showing audiences in China, Japan and the USA videotaped footage of preschools in the two societies other than their own, and seeking their responses to these videotapes. These fourth narrative perspectives were gleaned from the same participants who provided the third narrative perspectives as secondary insiders on videotaped footage of the preschool in their own culture: but in this role as providers of a fourth narrative perspective, these participants might now be referred to as secondary outsiders, with their responses stimulated and recorded in the same way as were their responses as secondary insiders.

This methodological focus on the different narratives of the observers should not lead us to overlook the importance of talking with and listening to the individuals under primary observation. If language is an integral aspect of making meaning in any culture, as I have argued in the earlier parts of this chapter, then researchers would do well to look closely at the language used by (if schools and classrooms are the focus of study) teachers, pupils, administrators, parents, and so on. In his own study, Alexander (2000) considered “the character of classroom language, the way that children are taught to use it, the kinds of learning it promotes, and how these three themes related to those wider, culturally embedded discourses about the nature and purposes of primary schooling (p. 427). As he reminds us,

to maximize our prospects of gaining access to ideas and meanings we must listen as well as look. Communication, both non-verbal and verbal, must be studied, and the language of classroom transaction must be attended to in some detail; but, especially, we must talk with those whom we watch. . . . The enterprise, then, is one of both external detachment and inter-subjectivity. (p. 269)

Of course the fourth narrative perspectives of Tobin's secondary outsider participants provide insights into the beliefs and practices associated with the culture being described as well as insights into the cultural beliefs associated with those doing the describing. Both of these sets of insights enable in turn the researchers, to take us full circle as it were, back to the perspectives of the primary outsiders themselves, to learn more about their own culturally biased perceptions: the problem of an ethnocentric perspective on the part of the researcher, to which I alluded earlier. As Tobin et al. (1989) put it,

Ethnographic judgements, whether rendered by a layman or by an anthropologist, reflect an intermingling of the culture being described and the culture doing the describing. Thus statements by American preschool parents and staff about a Chinese preschool have something to teach us about both American and Chinese beliefs and values. (p. 9)

International and comparative educational research across cultural contexts will perhaps be stronger for its acknowledgement that it is not only research about two or more cultures, in the cross-cultural sense, but also, inevitably, research that is intercultural in nature, in that it is about perspectives from the cultural contexts under study, and from the cultural perspectives of the researchers. The study of Tobin et al. (1989) succeeds in the best of both senses, and they acknowledge that that was indeed their aim (p. 9) in undertaking it. In this regard they cite the point made by Marcus and Fischer (1986) that the study of other cultures functions also as "a form of cultural critique of ourselves": in other words, as is so often heard in fields associated with comparative study across cultural contexts, such study serves to make not only "the exotic familiar", but also "the familiar exotic" (Tobin et al. 1989, p.10). Understanding and researching culture in international and comparative education, if conducted thoughtfully and sensitively, might then provide among the most insightful of instances of that old adage in the field, making the strange familiar and the familiar strange.

Note on Contributor

Mark Mason is Professor of International Education and Lifelong Learning at The Hong Kong Institute of Education, and Research Chair in the Department of International Education and Lifelong Learning. He works in the field of comparative and international education and development, from a disciplinary background in philosophy, social theory and education studies. He is Regional Editor (Asia & the Pacific) of the *International Journal of Educational Development* (Elsevier), and Associate Editor of the *Southern African Review of Education*. He was formerly Editor of the *CERC Studies in Comparative Education Series* (Springer), of the *Comparative Education Bulletin*, and of the *CERC Monograph Series in Comparative and International Education and Development*.

References

- Alexander R (2000) *Culture and pedagogy: international comparisons in primary education*. Blackwell, Oxford
- Althusser L (1966/2003) *The humanist controversy and other writings*. (ed: Matheron F, trans: Goshgarian GM). Verso, London
- Anderson B (1983) *Imagined communities: reflections on the origins and spread of nationalism*. Verso, London
- Austen J (1816/1985) *Emma*. Oxford University Press, Oxford
- Bacon F (1605/2001) *The advancement of learning*. Random House/Modern Library, New York
- Berger J (1972) *Ways of seeing*. British Broadcasting Corporation and Penguin Books, London/Harmondsworth
- Bhabha H (1990) *Nation and narration*. Routledge, London
- Bocock R (1992) *The cultural formations of modern society*. In: Hall S, Gieben B (eds) *Formations of modernity*. Polity Press, Basil Blackwell/The Open University, Cambridge/Oxford, pp 229–274
- Bray M, Adamson B, Mason M (eds) (2007) *Comparative education research: approaches and methods*. CERC/Springer, Hong Kong/Dordrecht
- Bridges D (2013) *Ethics, power and intellectual virtue: doing right in a diversified educational research environment*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 471–475
- Burawoy M, Blum JA, George S, Gille Z, Gowan T, Haney L, Klawiter M, Lopez SH, Riain S, Thayer M (2000) *Global ethnography: forces, connections and imaginations in a postmodern world*. University of California Press, Berkeley
- Delanty G (2000) *Citizenship in a global age: society, culture, politics*. Open University Press, Buckingham
- Derrida J (1981) *Positions* (trans: Bass A). University of Chicago Press, Chicago
- Fejes A (2013) *Using or mobilizing Foucault? Choice remarks on eclecticism and trends in educational research*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 229–232
- Foucault M (1982) *The subject and power*. In: Dreyfus HL, Rabinow P (eds) *Michel Foucault: beyond structuralism and hermeneutics*. Harvester, Hemel Hempstead, pp 208–226
- Gellner E (1983) *Nations and nationalism*. Blackwell, Oxford
- Hall S (1994) *The question of cultural identity*. In: Hall S, Held D, McGrew T (eds) *Modernity and its futures*. Polity Press, Basil Blackwell/The Open University, Cambridge/Oxford, pp 273–325
- Hammersley M (2006) *Ethnography: problems and prospects*. *Ethnogr Educ* 1(1):3–14
- Herder J (1784–1791) *Ideas on the philosophy of the history of mankind* (trans: Churchill T). Luke Hansard, London
- Ho DYF (1986) *Chinese patterns of socialization: a critical review*. In: Bond MH (ed) *The psychology of the Chinese people*. Oxford University Press, Hong Kong, pp 1–37
- Hobbes T (1651/1982) *Leviathan*. Penguin, Harmondsworth
- Hobsbawm E, Ranger T (eds) (1983) *The invention of tradition*. Cambridge University Press, Cambridge
- Hodgson N (2013) *On understanding power and the subject of educational research*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 233–235
- Hofstede G (2001) *Cultures consequences: comparing values, behaviours, institutions, and organizations across nations*, 2nd edn. Sage Publications, Thousand Oaks/London/New Delhi
- Keesing FM (1960) *Cultural anthropology: the science of custom*. Rinehart, New York
- Klemm GF (1843–1852) *General cultural history of mankind*. Teubner, Leipzig

- Kluckhohn F (1961) Dominant and variant value orientations. In: Kluckhohn F, Strodtbeck FL (eds) *Variations in value orientations*. Greenwood, Westport, pp 1–48
- Lacan J (1977) *Écrits: A Selection** (trans: Sheridan A). W.W. Norton & Co, New York
- Lauder H (2013) The problem with ‘disciplines’: a response to Bridges and Roberts. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 47–50
- Lee WO (1996) The cultural context for Chinese learners: conceptions of learning in the Confucian tradition. In: Watkins DA, Biggs JB (eds) *The Chinese learner: cultural, psychological and contextual influences*. CERC/ACER, Hong Kong/Camberwell, pp 25–41
- LeVine RA (1966) Outsiders’ judgments: an ethnographic approach to group differences in personality. *Southwest J Anthropol* 22(2): 101–116
- Marcus G, Fischer M (1986) *Anthropology as cultural critique: an experimental moment in the human sciences*. University of Chicago Press, Chicago
- Marx K (1852/1984) *The eighteenth Brumaire of Louis Bonaparte*. In: McLellan D (ed) *Karl Marx: selected writings*. Oxford University Press, Oxford
- Masemann VL (2003) Culture and education. In: Arnone RF, Torres CA (eds) *Comparative education: the dialectic of the global and the local*, 2nd edn. Rowman & Littlefield Publishers, Lanham, pp 115–132
- Mason M (2010) Critical theory and pedagogy. In: Peterson P, Baker E, McGaw B (eds) *International encyclopaedia of education*, 6th edn. Elsevier, Oxford, pp 133–140
- Olssen M (2013) Framing and analysing educational research: a recent history of transactions from a Foucauldian perspective. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 215–228
- Schwarz B (1986) Conservatism, nationalism and imperialism. In: Hall S, Donald J (eds) *Politics and ideology*. Open University Press, Milton Keynes
- Sharp R (1981) Self-contained ethnography or a science of phenomenal forms and inner relations. *Boston Univ J Educ* 164(1):48–63
- Sikes P, Nixon J, Carr W (2003) *The moral foundations of educational research: knowledge, inquiry and values*. Open University Press, Buckingham
- Tobin J (1999) Method and meaning in comparative classroom ethnography. In: Alexander R (ed) *Learning from comparing: new directions in comparative education research*. Symposium Books and Oxford University Press, Oxford, pp 113–34
- Tobin JJ, Wu DYH, Davidson DH (1989) *Preschool in three cultures: Japan, China, and the United States*. Yale University Press, New Haven
- Tobin J, Hsueh Y, Karasawa M (2009) *Preschool in three cultures revisited: China, Japan and the United States*. The University of Chicago Press, Chicago/London
- Tylor E (1870) *Primitive culture: researches into the development of mythology, philosophy, religion, language, art and custom*. J. Murray, London
- Wagner R (1981) *The invention of culture*. The University of Chicago Press, Chicago
- Williams R (1985) *Keywords: a vocabulary of culture and society*. Oxford University Press, New York
- Whorf B (1956) In: Carroll JB (ed) *Language, thought, and reality: selected writings of Benjamin Lee Whorf*. MIT Press, Cambridge
- Yang KS (1986) Chinese personality and its change. In: Bond MH (ed) *The psychology of the Chinese people*. Oxford University Press, Hong Kong, pp 106–170

Mark Bray

Abstract

Comparison is fundamental to all forms of educational research. Traditionally, the field of comparative education has had a cross-national focus, though there is no inherent reason why this must be the case and indeed many insights can be gained from cross-fertilisation with the approaches of researchers who make comparisons across different units of analysis within countries. The field of international education is allied to that of comparative education, though has different emphases. This chapter reviews some of the meanings and parameters of the twin fields, and remarks on ways in which they can contribute both to each other and to other domains of enquiry.

Keywords

International education • Comparative education • Units of analysis • Disciplinary interconnections • Globalisation

Introduction

The terms international and comparative education are commonly paired. However, they are not always clear in meaning, and an initial task for this chapter must therefore lie in identification of parameters. The chapter will then comment on some of the distinctive perspectives that can be contributed by international and comparative orientations in research. It will also consider some of the links between international and comparative research and other domains in the broad arena of educational studies.

Note: This chapter draws on the book *Comparative Education Research: Approaches and Methods* (Bray et al. 2007). Readers are referred to that book for elaboration of much of the content presented here.

M. Bray (✉)
Faculty of Education, University of Hong Kong, Hong Kong,
Hong Kong
e-mail: mbray@hkucc.hku.hk

Terms and Meanings

In different parts of the world, and in different communities at particular points in time, variations have been evident in the meanings of international and comparative education. A useful starting point for analysis is a 1968 book published in the United States and entitled *Problems and Prospects in International Education*. Its editors defined international education as “the various types of educational and cultural relations among nations” (Scanlon and Shields 1968, p. x). The editors pointed out that the definition blurred the distinction between practitioner and theorist.

In the year that this book was published, members of the U.S.-based Comparative Education Society (CES), which had been established in 1956, debated whether the body’s name should be widened to become the Comparative & International Education Society (CIES). Erwin H. Epstein was among the dissenters. Writing to the Society’s journal, *Comparative Education Review*, Epstein (1968, p. 376) quoted Scanlon’s definition of international education which, as elaborated in the quotation presented by Epstein, stated that while originally the term applied to formal education, “the concept has now broadened to include

government cultural relations programs, the promotion of mutual understanding among nations, educational assistance to underdeveloped regions, cross-cultural education, and international communications". Epstein argued that international education was less scientific than comparative education, and asserted that while inclusion of international education alongside comparative education would help to broaden the Society's membership, it risked alienating key members and lessening the Society's academic prestige.

Despite such arguments, the Society's name did change (Sherman Swing 2007, p. 102). However, the name of the journal did not. At the Society's 1968 annual business meeting, the proposal to change the name of the journal to *Comparative and International Education Review* was rejected. Epstein (1968, p. 376) suggested that part of the reason was that a link to international education in the title of the journal would have reduced the journal's prestige.

Subsequently, Epstein himself became Editor of the *Comparative Education Review* and decided to confront ambiguities in both the nature of the field and the function of the journal. Epstein (1992, p. 409) defined comparative education as "a field of study that applies social scientific theories and methods to international issues of education". Its counterparts, Epstein suggested, were fields dedicated to cross-societal study of other social institutions, such as comparative government, comparative economics, and comparative religion. International education, by contrast, was defined as "organized efforts to bring together students, teachers, and scholars from different nations to interact and learn about and from each other". Epstein viewed comparativists, first and foremost, as scholars who desired to explain how and why education relates to the social factors and forces that form its context, rather than merely to know about other people's cultures and their education.

Epstein invited readers to respond to his view of the differences between the two fields, and Wilson (1994) was among those who did so. Wilson challenged the implication that international educators necessarily had rather passive, system-descriptive roles, arguing (p. 452) that "international educators originated – and continue to practice – the melioristic trend more prominently associated with comparative education; that is, the improvement of national education systems by the addition of models, practices, innovations, and the like borrowed or transferred from other national educational systems". Wilson asserted the value of the products from linkages between the pair of fields, describing them as twins and suggesting that they appeared more like Siamese than fraternal twins.

Related remarks had been made a few years earlier by Postlethwaite (1988). He noted that many studies published under the umbrella of comparative education were not comparative in the sense of placing two or more entities side by side in order to identify similarities and differences. Rather,

a significant number of studies examined "a particular aspect of education in *one* country other than the author's own country" (p. xvii). Postlethwaite stated that the CIES introduced the word International to its title in order to cover these sorts of studies.

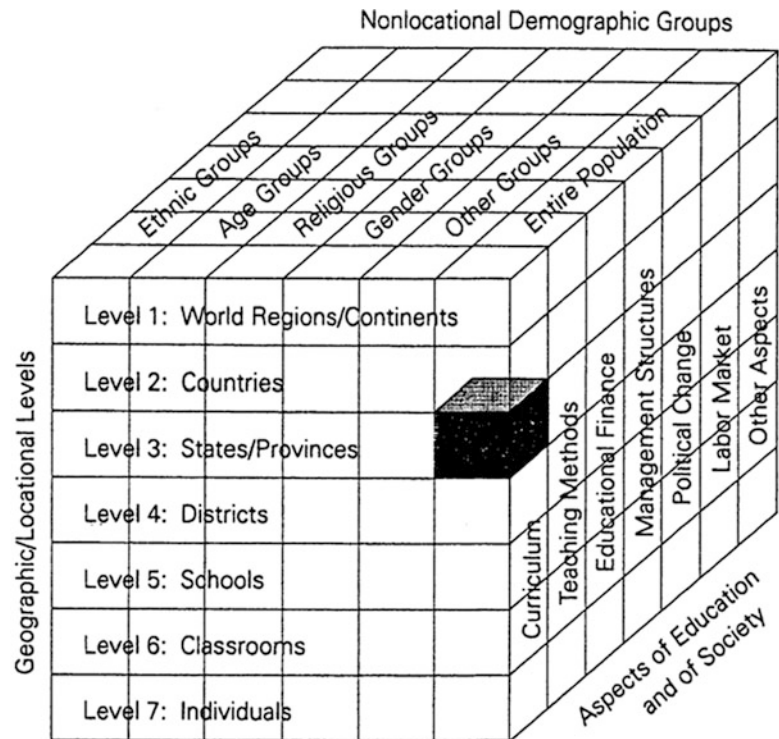
Thus, the definition of international education presented by Postlethwaite was rather different from that presented by Scanlon and Shields (1968) or by Epstein (1992). However, this definition also had wide currency and was endorsed, for example, by Crossley and Watson (2003, p. 18). Those authors indicated that when the British Comparative Education Society (BCES) changed its name in 1983 to become the British Comparative and International Education Society (BCIES), it did so with similar motives to those in the CIES 15 years earlier. Among the major forces for the change was financial stringency, which encouraged universities to seek resources from external projects and consultancies, and which strengthened focus on practical dimensions in other countries as a complement to, and perhaps even a substitute for, academic conceptualisation (Watson and King 1991). Further change of nomenclature came in 1997, when the BCIES merged with the British Association of Teachers and Researchers in Overseas Education (BATROE) to become the British Association for International and Comparative Education (BAICE). Again, the change was partly driven by a desire to widen the constituency and bring together practitioners as well as academics (Sutherland et al. 2007).

Conceptualising Comparisons

Figure 45.1 reproduces a cube presented by Bray and Thomas (1995, p. 475) in a paper entitled 'Levels of Comparison in Educational Studies: Different Insights from Different Literatures and the Value of Multilevel Analyses'. The paper commenced by noting that different fields within the wider domain of educational studies had different methodological and conceptual emphases, and that the extent of cross-fertilisation was somewhat limited. The field of comparative education, for example, was dominated by cross-national comparisons and made little use of intra-national comparisons. In contrast, many other fields were dominated by local foci and failed to benefit from the perspectives that could be gained from international studies. The paper then pointed out that although the field of comparative education had been dominated by cross-national foci, many other domains lacked such perspectives. The authors argued that stronger relationships between different fields would be facilitate more comprehensive perspectives.

On the front face of the cube are seven *geographic/location* levels for comparison: world regions/continents, countries, states/provinces, districts, schools, classrooms,

Fig. 45.1 A framework for comparative education analyses (Source: Bray and Thomas (1995, p. 475))



and individuals. The second dimension contains *nonlocational demographic* groups, including ethnic, age, religious, gender and other groups, and entire populations. The third dimension comprises *aspects of education and of society*, such as curriculum, teaching methods, finance, management structures, political change and labour markets. Many studies that are explicitly comparative engage all three dimensions, and thus can be mapped in the corresponding cells of the diagram. For example, the shaded cell in Fig. 45.1 represents a comparative study of curricula for the entire populations of two or more provinces.

An overarching point of the article by Bray and Thomas was a call for multilevel analyses in comparative studies to achieve multifaceted and holistic analyses of educational phenomena. The authors observed that much research remained at a single level, thereby neglecting recognition of the ways in which patterns at the lower levels in education systems are shaped by patterns at higher levels and vice versa. While researchers can often undertake only single-level studies because of constraints dictated by purpose and availability of resources, Bray and Thomas suggested that researchers should at least recognise the limits of their foci and the mutual influences of other levels on the educational phenomena of interest.

The Bray and Thomas framework has been extensively cited, both in literature that is explicitly associated with the field of comparative education (for example Arnove 2001; Ferrer 2002; Phillips and Schweisfurth 2006; Wolhuter 2008) and in broader literature (for example Frank 1998;

Ballantine 2001; Schwippert 2009). It has generally been seen as useful, and some authors have endeavoured to take it further by making explicit what was already implicit. For instance, Watson (1998, p. 23) highlighted an alternative grouping of countries and societies according to religion and colonial history. Such alternative categories are in fact already represented in the ‘nonlocational demographic’ dimension of the framework, though rather than being ‘nonlocational’ they might perhaps be more aptly termed ‘pluri-locational’ or ‘multi-territorial’.

The cube was subsequently made a central focus in a 2007 book on approaches and methods in comparative education research (Bray et al. 2007). The book noted that like all models it had its limitations, but suggested that the cube had stood well the test of time. The cube emphasises that comparisons can usefully be made within as well as across countries. It also shows ways in which the field of comparative education can contribute and learn from other fields within the broad domain of educational studies.

Links with Other Fields

Because the disciplines which have had the greatest impact on the field of comparative education are clustered in the social sciences, shifts in dominant paradigms within the social sciences have led to shifts in the field of comparative education. This includes the rise of positivism in the 1960s and 1970s, particularly in Europe and

North America, and the popularity of post-modernism in the 1980s and 1990s (see, for example, Psacharopoulos 1990; Crossley 2000; Paulston 2000; Daun 2009). Subsequently, the metanarrative of globalisation has provided a major framework (see, for example, Mok and Welch 2003; Hershock et al. 2007; Arnove 2009). However, comparative education scholars have tended to use a fairly limited set of tools from the social sciences. This is partly because much (or even most) comparative education is in a sense a second-level comparison which relies on units that have already been identified through comparison (Olivera 1988, 2009). Books and journal articles in the field of comparative education display many commentaries based on literature reviews, but relatively few studies based on surveys, and almost no studies based on experimental methods.

Various authors have analysed the major journals of the field to identify dominant patterns of methodology and focus. For example, Rust et al. (1999) analysed articles in the *Comparative Education Review* published in the United States, *Comparative Education* published in Britain, and the *International Journal of Educational Development* also published in Britain. Examining articles in the 1960s, they found (p. 100) that 48.5 % were mainly based on literature review and 15.2 % were historical studies. For the 1980s and 1990s, Rust et al. found a marked drop in the two categories – to 25.7 % mainly based on literature review, and 5.0 % historical studies. Reviews of projects had increased, as had participant observation and research based on interviews and questionnaires. In this respect, the field had increased its use of some standard social science instruments. A related study by Wolhuter (2008) examined the 1,157 articles in the first 50 volumes of the *Comparative Education Review*. Wolhuter identified “ample scope for a broadening of repertoire” (p. 333), suggesting in particular that phenomenology and critical ethnography “could assist in making comparative education a livelier project”.

However, the nature of the themes and methodological approaches have been very different in different parts of the world at particular periods in history. Thus, although Rust et al. (1999) referred throughout their article to “the field” of comparative education, their analysis focused only on English-language journals, and only on ones published in the United States and Britain. Cowen (2000, p. 333; 2009, p. 1285) has highlighted the co-existence of multiple comparative educations. His observation on the one hand applies to different groups within particular countries who have different methodological approaches and domains of enquiry, and who may or may not communicate with each other. It also applies to groups in different countries who operate in different languages with different scholarly traditions, and who also may or may not communicate with counterparts in other countries and language groups.

In this connection, it is useful to note the maps produced by Paulston (1997, 2000, 2009). One of these maps (Paulston 1997, p. 142) is a spatial display of theories in international and comparative education. While it portrays some overlap in the perspectives of humanists and functionalists, it also shows domains in which they operated entirely independently of each other. A similar point could be made apparent by review of bibliographies: many scholars in the pair of fields simply ignore others who have different viewpoints, and are nevertheless able to get their work published either because the journals in which they publish are eclectic in focus or because the journals serve different audiences.

To the differences which arise between scholars who work in different paradigms within particular countries, and who do not communicate with each other despite being nationals of the same countries and writing in the same languages, may be added the differences between scholars who live in different countries and who write in different languages. Scholars may of course use similar paradigms even though they operate in different languages; but the probability that they will use different paradigms is increased when they do not even share a common language. Concerning this matter, it is instructive to compare the work of Harold Noah and Max Eckstein during the three decades from the mid 1970s with that of Gu Mingyuan. Sets of collected works by these authors have been published by the Comparative Education Research Centre at the University of Hong Kong, and thus may easily be placed side by side (Noah and Eckstein 1998; Gu 2001). Among the major concerns of Noah and Eckstein, who were based in the United States and who operated mainly in the English-speaking arena, were methodological issues in the positivist framework and oriented to First World concerns. Gu, by contrast, operated mainly in the Russian- and Chinese-speaking arenas. His writings, particularly during the early part of his career, were couched within a Marxist-Leninist framework, and he was especially concerned with the lessons that China could learn from industrialised countries. Particularly during the 1970s and 1980s, the comparative education world in which Gu lived was a very different environment from that in which Noah and Eckstein lived.

Geomorphic Shifts

Becher and Trowler (2001) observed major changes in the domain of higher education during the late 1980s and 1990s, particularly in Britain and the United States. These changes brought what Becher and Trowler called “major geomorphic shifts” in the landscape on which the academic territories lay. Among the causes were the increasingly intrusive role of the state, demands for performativity, and an increasing need for academics to “chase the dollar”. The impact of these

changes has been felt in the twin fields of comparative and international education as well as in other fields. However, the nature of the geomorphic shifts has been different in different parts of the world; and despite the geomorphic shifts, much continuity is evident.

In Britain and the United States, one way in which the state has affected international and comparative education has been through foreign aid policies. Rust et al. found that during the 1980s and 1990s, reviews of projects were more prominent than in earlier years in the three journals that they surveyed. Many of these projects were conducted under the auspices of the UK government's Department for International Development (DFID) or its predecessors, and of the United States Agency for International Development (USAID). Many of the projects employed academics as consultants, and the types of projects on which those government bodies chose to focus in turn influenced the twin fields of international and comparative education. Insofar as projects focused on primary rather than secondary education or vocational education, for example, academic papers were written about those domains. Also, many papers in British and U.S. journals have been concerned about the role of external assistance *per se*, including the work not only of bilateral agencies but also of multilateral ones such as the World Bank and UNESCO.

The policies of multilateral agencies and of governments in both rich and poor countries have also influenced the extent to which particular countries have been given prominence. This point may be illustrated by contrasting the visibility in the comparative and international education conferences and literature of Nigeria and China. During the 1970s and 1980s Nigeria was relatively visible, first because of the foreign aid projects in Nigeria, second because Nigeria used its oil-generated revenues to recruit many foreign nationals for its education system, and third because the Nigerian government funded many Nigerians to go abroad for higher education. By the 1990s, the oil boom had evaporated and external bodies were less interested in Nigeria. Also, conditions for research in Nigeria by non-Nigerians became even more difficult than they had been, in part because of social unrest. By contrast, before the 1990s very few papers on China were presented in the conferences and journals of the British and U.S. comparative and international education societies. This was chiefly because the Chinese government operated a relatively closed-door policy, neither letting foreign researchers in nor encouraging Chinese scholars to go out. Related to this, the British and U.S. governments operated few projects in China. By the 1990s, however, this picture had changed dramatically. Many Chinese scholars were studying in British and U.S. universities, and had brought their insights and data with them. Foreign nationals found it much easier to visit China through a range of programmes, including aid projects financed by foreign governments. A further significant

element was the increase in the number of Chinese scholars who learned English and who therefore had access to literature in English and were able to communicate with outsiders in that language.

Another geomorphic shift of great significance to the pair of fields was the break up of the Soviet Union. Insofar as countries were a major unit of analysis, the division of the USSR into 15 sovereign states greatly increased the visibility of those states in the field. As in China, moreover, the English language became much more widely spoken than had previously been the case.

Concerning performativity, which was another element identified by Becher and Trowler, the UK became well known for its Research Assessment Exercises, which had counterparts in Hong Kong and various other places. These Exercises increased pressure on academics to publish, and in the field of comparative and international education contributed to the expansion of existing journals and to the launch of new ones. For example, in 1993 the British journal *Compare: A Journal of Comparative Education* increased from two to three issues a year, further expanded to four issues a year in 2003, and then to five issues a year in 2007. In 2009 it expanded further to six issues a year, and also changed its sub-title to become *A Journal of Comparative and International Education*. On the one hand this seemed to be further demonstration of the blurring of boundaries between the twin fields; but on the other hand it showed a convergence between the title of the journal and the name of its sponsoring body, the British Association for International and Comparative Education (BAICE). The journal was supplemented by new ones, among which was *Research in Comparative and International Education*, launched in Britain in 2006. Other new journals included *Current Issues in Comparative Education*, launched in the United States in 1998, and the *American Comparative and International Education Review* launched in 2010.

The third element in the geomorphic shift identified by Becher and Trowler (2001) was increased financial pressure. Government reductions in the extent to which they funded higher education institutions were coupled with intensified competition between institutions. Many institutions sought to increase their non-government revenues through recruitment of fee-paying overseas students. This trend was especially evident in Australia, for example, where higher education for overseas students became a major industry (Welch 2002; Ninnes and Hellstén 2005). In the process, the institutions and their staff members became more outward-looking. This internationalisation further contributed to the field of comparative education.

Related to this phenomenon, and extending the geomorphic shifts, has been the intensification of globalisation. In some respects, globalisation has revitalised the field of comparative education by emphasising the need for cross national perspectives and by providing new themes for

analysis. However, in another sense it has diluted the field because many academics consider themselves to have international and comparative perspectives but have weak or non-existent grounding in the methodologies and traditions of the field (Crossley 2000; Crossley and Watson 2003).

Finally, geomorphic shifts have been brought by technology. One component has been increased access to inexpensive air travel, which has facilitated the work of scholars who wish to undertake research outside their own countries. Perhaps even more significant has been the advent of the internet, which has greatly increased access to information. Accompanying the internet has been the invention of e-mail, which has permitted academics dispersed around the globe to communicate with each other almost instantaneously at low cost. New technologies have also brought changes in the publishing industry. Some journals in the field, such as *Current Issues in Comparative Education* and *Research in Comparative and International Education* mentioned above, are solely internet-based; and among the traditional journals, many have moved to electronic publication in parallel to their paper versions.

Partly because several of these geomorphic shifts were global in scope, the geographic differences in the field of comparative education, highlighted above by contrasting the book written by Noah and Eckstein with that written by Gu, tended to narrow. Enlarging on this example, as China opened up and as English became more widespread, scholars in China paid more attention to the literatures and methodological approaches of Western countries. Academic interchange between the two cultures increased, facilitated by translations of materials and by cross-national visits by both sides.

Conclusions

The fields of international and comparative education can be considered to be distinct from each other but overlapping and related. Indeed Wilson (1994) described them as a pair of Siamese twins. This metaphor resonated with many observers, and has been echoed many times (see e.g. Turner 2010).

The loose nature of the boundaries of the twin fields can be problematic from the perspective of scholarly rigour, but is advantageous insofar as the fields can accommodate diversity. Furthermore, the fields offer perspectives that can be useful to other parts of the broad domain of educational studies. As such, they are important elements of conceptualization and contextualization in educational research. International and comparative perspectives may also contribute distinctively to representation of educational research, perhaps especially in the ways that the voices of different cultures are heard and recognised.

Like all fields of enquiry, the fields of international and comparative education are evolving over time (Cook et al.

2004; Epstein 2008; Daun 2009; Wiseman and Matherly 2009). Geomorphic shifts have arisen from changes in international relations and in the foreign policies of individual governments. They have also arisen from the forces of globalisation and the changing role of the state (Law 2009). In the twenty first century the types of parochial perspectives that were common during previous eras are much less easy to sustain. International and comparative approaches may be sources not only of ideas and understanding but also of legitimacy in an increasingly interconnected world.

Note on Contributor

Mark Bray is a Chair Professor and Director of the Comparative Education Research Centre (CERC) at the University of Hong Kong. Before joining the university in 1986, he taught in secondary schools in Kenya and Nigeria and at the Universities of Edinburgh, Papua New Guinea and London. At the University of Hong Kong he has been Dean of the Faculty of Education. From 2006 to 2010 he was Director of UNESCO's International Institute for Educational Planning (IIEP) in Paris. He has also been President of the Comparative Education Society of Hong Kong (CESHK) and the World Council of Comparative Education Societies (WCCES). He has written extensively on methodology in comparative education research and on the financing, administration and planning of education.

References

- Arnove RF (2001) Comparative and international education society (CIES) facing the twenty-first century: challenges and contributions. *Comp Educ Rev* 45(4):477–503
- Arnove RF (2009) World-systems analysis and comparative education in the age of globalization. In: Cowen R, Kazamias A (eds) *International handbook of comparative education*. Springer, Dordrecht, pp 101–119
- Ballantine JH (2001) *The sociology of education: a systematic analysis*. Prentice Hall, Upper Saddle River
- Becher T, Trowler PR (2001) *Academic tribes and territories: intellectual enquiry and the culture of disciplines*, 2nd edn. The Society for Research into Higher Education & Open University Press, Buckingham
- Bray M, Thomas RM (1995) Levels of comparison in educational studies: different insights from different literatures and the value of multilevel analysis. *Harvard Educ Rev* 65(3):472–490
- Bray M, Adamson B, Mason M (eds) (2007) *Comparative education research: approaches and methods*, vol 19, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong /Springer, Hong Kong/Dordrecht
- Cook BJ, Hite SJ, Epstein EH (2004) Discerning trends, contours, and boundaries in comparative education: a survey of comparativists and their literature. *Comp Educ Rev* 48(2):123–149
- Cowen R (2000) Comparing futures or comparing pasts? *Comp Educ* 36(3):333–342
- Cowen R (2009) Then and now: unit ideas and comparative education. In: Cowen R, Kazamias A (eds) *International handbook of comparative education*. Springer, Dordrecht, pp 1277–1294

- Crossley M (2000) Bridging cultures and traditions in the reconceptualisation of comparative and international education. *Comp Educ* 36(3):319–332
- Crossley M, Watson K (2003) *Comparative and international research in education: globalisation, context and difference*. RoutledgeFalmer, London
- Daun H (2009) A way forward. In: Holsmardottir HB, O'Dowd M (eds) *Nordic voices: teaching and researching comparative and international education in the Nordic countries*. Sense Publishers, Rotterdam, pp 281–307
- Epstein EH (1968) Letter to the editor. *Comp Educ Rev* 12(3):376–378
- Epstein EH (1992) Editorial. *Comp Educ Rev* 36(4):409–416
- Epstein EH (2008) Crucial benchmarks in the professionalization of comparative education. In: Wolhuter C, Popov N, Manzon M, Leutwyler B (eds) *Comparative education at universities worldwide*. Bureau for Educational Services, Sophia, pp 9–24
- Ferrer F (2002) *La Educación Comparada Actual*. Editorial Ariel, Barcelona
- Frank KA (1998) Quantitative methods for studying social context in multilevels and through interpersonal relations. *Rev Res Educ* 23:171–216
- Gu M (2001) *Education in China and abroad: perspectives from a lifetime in comparative education*, vol 9, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong, Hong Kong
- Hershock PD, Mason M, Hawkins JN (eds) (2007) *Changing education: leadership, innovation and development in a globalizing Asia Pacific*, vol 20, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong/Springer, Hong Kong/Dordrecht
- Law WW (2009) The developmental state, social change, and education. In: Cowen R, Kazamias A (eds) *International handbook of comparative education*. Springer, Dordrecht, pp 257–275
- Mok K, Welch AR (2003) *Globalization and educational restructuring in the Asia Pacific region*. Palgrave Macmillan, Basingstoke
- Ninnes P, Hellstén M, Hellstén M (eds) (2005) *Internationalizing higher education: critical explorations of pedagogy and policy*, vol 16, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong/Springer, Hong Kong/Dordrecht
- Noah HJ, Noah HJ, Eckstein MA (eds) (1998) *Doing comparative education: three decades of collaboration*, vol 5, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong, Hong Kong
- Olivera CE (1988) Comparative education: towards a basic theory. *Prospects Quart Rev Educ* XVIII(2):167–185
- Olivera CE (2009) *Introducción a la Educación Comparada*. Editorial Universidad Estatal a Distancia, San José (Costa Rica)
- Paulston RG (1997) Mapping visual culture in comparative education discourse. *Compare* 27(2):117–152
- Paulston RG (ed) (2000) *Social cartography: mapping ways of seeing social and educational change*. Garland, New York
- Paulston RG (2009) Mapping comparative education after postmodernity. In: Cowen R, Kazamias A (eds) *International handbook of comparative education*. Springer, Dordrecht, pp 965–990
- Phillips D, Schweisfurth M (2006) *Comparative and international education: an introduction to theory, method and practice*. Continuum, London
- Postlethwaite TN (1988) Preface. In: Postlethwaite TN (ed) *The encyclopedia of comparative education and national systems of education*. Pergamon Press, Oxford, pp xvii–xxvii
- Psacharopoulos G (1990) Comparative education: from theory to practice, or are you A:\neo.* or B:*.ist? *Comp Educ Rev* 34(3):369–380
- Rust V, Soumaré A, Pescador O, Shibuya M (1999) Research strategies in comparative education. *Comp Educ Rev* 43(1):86–109
- Scanlon DG, Shields JJ (1968) Introduction: scope and purposes of international education. In: Scanlon DG, Shields JJ (eds) *Problems and prospects in international education*. Teachers College Press, New York, pp ix–xxii
- Schwippert K (2009) Gibt es eine Chancengleichheit in einer heterogenen Gesellschaft? Gedanken eines Empirikers. In: Sylvester I, Sieh I, Menz M, Fuchs HW, Behrendt J (eds) *Bildung-Recht-Chancen: Rahmenbedingungen, empirische Analysen und internationale Perspektiven zum Recht auf chancengleiche Bildung*. Waxmann, Münster, pp 83–96
- Sherman Swing E (2007) The comparative and international education society (CIES). In: Masemann V, Bray M, Masemann V, Bray M, Manzon M (eds) *Common interests, uncommon goals: histories of the world council of comparative education societies and its members*, vol 21, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong/Springer, Hong Kong/Dordrecht, pp 94–115
- Sutherland MB, Watson K, Crossley M (2007) The British association for international and comparative education (BAICE). In: Masemann V, Bray M, Manzon M (eds) *Common interests, uncommon goals: histories of the world council of comparative education societies and its members*, vol 21, CERC studies in comparative education. Comparative Education Research Centre, The University of Hong Kong/Springer, Hong Kong/Dordrecht, pp 155–169
- Turner DA (2010) The twin fields of comparative and international education. In: Masemann V, Majhanovich S, Truong N, Janigan K (eds) *A tribute to David N. Wilson: clamouring for a better world*. Sense Publishers, Rotterdam, pp 261–270
- Watson K (1998) Memories, models and mapping: the impact of geopolitical changes on comparative studies in education. *Compare* 28(1):5–31
- Watson K, King K (1991) From comparative to international studies in education: towards the Co-ordination of a British resource of expertise. *Int J Educ Dev* 11(3):245–253
- Welch AR (2002) Going global? Internationalizing Australian universities in a time of global crisis. *Comp Educ Rev* 46(4):433–471
- Wilson DN (1994) Comparative and international education: fraternal or Siamese twins? A preliminary genealogy of our twin fields. *Comp Educ Rev* 38(4):449–486
- Wiseman AW, Matherly C (2009) The professionalization of comparative and international education: promises and problems. *Res Comp Int Educ* 4(4):334–355
- Wolhuter CC (2008) Review of the review: constructing the identity of comparative education. *Res Comp Int Educ* 3(4):323–344

Viviane M.J. Robinson

Abstract

While there are numerous reasons given for the limited impact of research on practice, there is little discussion of how research methodology itself may contribute to the research-practice gap. This chapter argues that much educational research is mismatched to practice because it bypasses rather than engages the theories of action that inform practice. The chapter explains and illustrates what is meant by engaging theories of action through a discussion of problem-based methodology (PBM). Problem-based methodology incorporates an account of the nature of practice, of how to uncover the theories of action that constitute practice, and of how to collaboratively evaluate and revise those theories. PBM also incorporates a social relations of inquiry that outlines the values and interpersonal behaviours involved in collaborative evaluation and revision of theories of action. Some methodologists doubt that the pursuit of practical improvement is compatible with the pursuit of rigorous inquiry. They argue that the pursuit of improvement undermines the integrity of the research. While acknowledging that this is a danger, I argue that PBM incorporates procedures for disconfirmation, theory adjudication and collaborative inquiry that make it possible to pursue simultaneously both the advancement of knowledge and the improvement of practice.

Keywords

Action research • Collaborative research • Methodology • Research and practice • Theories of action

Introduction

Ten years ago I dedicated an address I gave on the research-practice gap as follows: “*To all those educational researchers who have wished that educational practitioners and policy makers would take more notice of their work and to all those practitioners and policy makers who have wished that educational researchers would produce more that was worth taking notice of:*” Behind the ironic humour was a serious message about the limited impact of research on practice and about the complexity of the relationship between the two. While there

may be contention about just how much impact educational research does have on practice, it is often argued that it is desirable that it have an impact and that it be greater than it is at present (Fusarelli 2008; Goldhaber and Brewer 2008).

The first purpose of this chapter is to discuss a range of reasons why educational research has a limited impact on policy and practice. While agreeing with arguments about the limited availability of consistent and high quality research findings, and about their politicisation, I propose additional *methodological* reasons for the research-practice gap. I argue that much educational research is mismatched to the nature of practice in that it bypasses rather than engages the theories of action that inform it (Argyris and Schön 1974, 1978; Argyris et al. 1985). Methodologies that bypass theories of action may yield valuable empirical and

V.M.J. Robinson (✉)
Faculty of Education, University of Auckland, Auckland, New Zealand
e-mail: vmj.robinson@auckland.ac.nz

theoretical resources for the critique of practice, but these resources will not change the relevant practices, unless coercively, until there is serious engagement between the theories of the researcher and the theories of action held by relevant practitioners.

The second purpose of this chapter, therefore, is to discuss a methodology which promotes engagement with theories of action by revealing, collaboratively evaluating and, if necessary, revising them. The proposed problem-based methodology (PBM) also incorporates a social relations of inquiry that outlines the values and interpersonal behaviours that guide the collaborative evaluation and revision of theories of action (Robinson 1993; Robinson and Lai 2006).

Having briefly outlined PBM and compared it with some other research approaches that also involve inquiry into theories of practice, I then play devil's advocate by raising the possibility that, in attempting to gain more traction in the world of practice, this methodology violates principles and values that are central to the research endeavour itself. In essence, this is the view taken by Martyn Hammersley in a series of articles on action research (Hammersley 2003, 2004). For Hammersley, research has the exclusive immediate goal of producing knowledge. In his view, the values and processes required to meet this goal are compromised if additional goals, such as the improvement of practice, are pursued simultaneously. In my discussion of Hammersley's argument I conclude that researchers' desire to improve practice does not necessarily undermine the validity and rigour of their findings.

It is important to note that the argument made throughout this chapter about how to reduce the research-practice gap should not be construed as implying that *all* educational research should adopt the proposed methodology. Much educational research does not have the improvement of practice as a central purpose. The argument is that *if* this purpose is central, then a methodology which is well matched to the nature of practice will considerably increase the chances of achieving it.

Explanations of the Research-Practice Gap

While there are numerous explanations for the limited impact of research on educational policy and practice, they can be grouped into three broad categories. The first concerns the complexity and inconsistency of educational research findings. The second attributes the limited impact to the politicisation of the educational research enterprise, which has damaged its reputation and reduced the moral force of calls for education officials and policy makers to pay more heed to research findings. The third, less commonly discussed category, involves methodological explanations of the research-practice gap.

The Complexity of Educational Research Findings

When policy makers and practitioners seek answers to questions about what works in education they are frequently disappointed. Rather than get clear messages from researchers about "what works" they frequently get contested findings or answers of the "it depends" variety (Fusarelli 2008).

Some commentators argue that clear-cut research generalisations are not forthcoming in education because of the complexity of the phenomena that social scientists investigate. For example, in an article on the contribution of research to educational practice, Phillips (1980) concludes that, "The bottom line is that social scientists have not been able to discover generalizations that are reliable enough, and about which there is enough professional consensus, to form the basis for social policy" (p. 17). Phillips attributes the apparent failure, at least in part, to the complexity of the phenomena that social scientists investigate. One aspect of this complexity is that individual differences in human abilities and aptitudes lead people to react differently to different interventions. Another aspect is that social and educational interventions have multiple components and subtle shifts in those components across implementation contexts can produce differing results. Both of these factors reduce the probability of developing clear research generalisations. Other commentators see the paucity of robust educational research findings as an indictment on the quality of educational scholarship rather than a reflection of the complexity of the phenomena itself (Goldhaber and Brewer 2008).

The Politicisation of Educational Research Findings

It is a sign of a robust research community that peers challenge research findings both before and after publication. Policy makers and politicians can become cynical about the quality of educational research, however, if high profile research findings are subsequently discredited. Some authors argue that pressure on educational researchers to win large grants, publish quickly and demonstrate their impact on policy, can short circuit the quality assurance processes that would otherwise ensure that errors of analysis, overblown conclusions and selective use of published research are detected and corrected prior to publication (Fusarelli 2008). There is also a danger that pressure on academic researchers to be influential as well as informative can undermine the norms of inquiry that promote cautious conclusions, fair-mindedness and a relentless pursuit of the truth.

Research findings lose credibility among practitioners when they are seen as politically motivated in the sense

that the researcher's political agenda overrides or distorts the processes required to ensure their validity (Fusarelli 2008). Since there is a sense in which all research is political, it is worth taking some time to explore what aspects of the politics of research do and do not threaten its validity and credibility.

Validity is about the extent to which a claim to know something is justified. Research findings, like any claim, are justified by argument or evidence, and in particular, by showing that the research procedures have included a range of strategies for detecting evidence or arguments that would trigger a revision of the emerging conclusions (Fay 1996). These strategies of disconfirmation are critical to validity, since the research process is inevitably subjective and value-laden. The selection of research questions, theoretical frameworks, information sources and analytic categories is influenced by the values and interests of the researcher. Indeed, there is no way of ever removing all the value-laden and subjective interpretations involved in doing research (Fay 1996). Given the inevitable subjectivity of research, it is correct to say that all research is political in this weak sense.

It is not correct, however, to go the next step and say that research is inevitably partisan and biased. The mere selection of a question, research approach and conceptual framework does not produce bias. Bias results when the manner of selection favours answers to research questions that fit the researchers' existing political or practical commitments (Hammersley 2000). This means that researchers have paid insufficient attention to evidence that challenges or questions their existing views. The key to improving validity is noticing when you are wrong – when assumptions, hunches and initial understandings turn out to be mistakes. Good research design is centrally concerned with gathering and systematically attending to evidence that could disconfirm prior hunches and hypotheses. Policy makers and practitioners are right to be skeptical of research where strong advocacy of a position is not supported by a methodology which includes transparent conceptual and/or empirical procedures for locating and responding to disconfirming argument and evidence.

In summary, the impact of research on policy and practice is weakened when it gains a reputation for being biased and partisan. Certainly, the evidence presented by Fusarelli (2008) from his interviews with educational officials suggests that that perception is not uncommon, in the US at least. The perception may also be reinforced by failure among educational researchers themselves to make a clear distinction between the inevitably political nature (in the weak sense) of educational research and the entirely avoidable sin of partisanship and bias. Failure to inculcate this distinction in educational researchers undermines the imperative to strive for validity in research of whatever methodological persuasion.

Methodological Reasons for the Research-Practice Gap

While not discounting the importance of the two prior explanations for the research-practice gap, I shall argue that there are additional methodological reasons for the gap. In brief, those reasons concern the mismatch between generic features of practice and aspects of the methodologies employed in education and social research. I first outline the generic features of practice and then discuss their implications for developing a methodology that is well matched to practice.

The Nature of Practice

The problems practitioners encounter are practical ones – that is they involve determining how to act in specific contexts. For example, every school must determine how to allocate students to programmes and teachers; how to establish one or more budgets; how to raise money for extra resources and what to do with students who are repeatedly absent from class. Schools solve such problems by adopting, adapting, or designing policies, procedures and routines.

Given there is more than one way to solve each of these problems, understanding practice in any of these instances requires investigation of the problem-solving processes that led those involved to adopt one particular policy or routine rather than any of the plausible alternatives. Such investigation requires an understanding of what is involved in solving a practical problem and a methodology that is well matched to those problem-solving processes.

The most important part of problem-solving involves specifying a problem's constraints, that is, the things that need to be taken into account in coming up with an adequate solution. The more clearly constraints are specified, the more clearly one can discriminate between more and less adequate solution candidates. Problems that have no constraints are impossible to solve as there are too many possible solutions. Strictly speaking, they are not problems at all, as a problem is by definition a set of constraints on a solution, plus the demand that the problem be solved (Nickles 1981, 1988). Imagine trying to solve the problem of setting a school budget without being given any constraints in terms of total amount, expenditure categories or strategic priorities. The problem can not be solved, because, without constraints on the solution, an infinite number of possible budgets are acceptable.

There are many different types of constraints, including values and beliefs, regulatory requirements, available financial and human resources, and other practices with which any proposed solution must articulate. The explicit or

Table 46.1 A hypothetical staff's view of the constraints on school-wide assessment

Staff comments	Implied constraints
"The Board will misinterpret the information"	Accuracy of interpretation
"It must be useful for my teaching"	Useful to classroom teachers
"As Director of Curriculum, I need to know whether our programmes are effective"	Useful for programme evaluation
"We are legally required to inform the Board and Ministry of Education"	Accountability to external stakeholders
"In this political climate the information will be used to further bash teachers"	Protect teachers from misuse of information
"It must be computerised to be manageable"	Efficiency

From Robinson (2001)

implicit specification of the relevant set of constraints is the process of formulating the problem. The problem is solved by adopting or designing practices which adequately integrate the constraints that problem-solvers set on the solution. The more tension between the various constraints, the more difficult it is to design a solution that satisfies the principles which underlie all the constraints.

In order to provide a concrete illustration of how this works, imagine a hypothetical school in which the principal has led a discussion of the need to strengthen collaborative use and reporting of school-wide assessment information. The left hand side of Table 46.1 provides a summary of the main issues that have been raised in staff's preliminary discussions about the type of school-wide assessment they wish to develop. On the right hand side of the table are the constraints on any proposed solution that are implied by each staff comment. For example, the comment that, "In this political climate the information will be used to further bash teachers," implies opposition to any assessment practices which have this potential. Those who make this comment are suggesting that protection of teachers from misuse of assessment information must be one of the constraints on an acceptable solution to the problem of how to improve the use and reporting of assessment information. Advocates of this constraint may not accept any form of school-wide assessment if they believe that it is not possible to solve the problem without violating this constraint to an unacceptable degree.

Problems are solved by discovering or designing practices which adequately integrate the proposed constraints. For our assessment problem, this involves developing procedures which, as far as possible, provide reliable information, have utility for both classroom teaching and programme evaluation, satisfy external accountabilities, protect teachers from possible misuse of the information and are efficient.

It is obvious that there is considerable tension between these various solution requirements. Indeed, some would argue that the constraints in Table 46.1 are irreconcilable. The tensions inherent in this example can be appreciated by evaluating various possible assessment solutions against the listed constraints. Achievement data that are easily aggregated

and reported to external stakeholders may tell teachers that improvement is needed, but provide little diagnostic information about students' difficulties. If more detailed diagnostic data are collected, the requirement to assist classroom teachers will be better satisfied, but the efficiency constraint may then be violated to an unacceptable level. While this example may be extreme, tension between constraints is precisely what makes so many educational problems intractable. These tensions also explain why educational policies and practices are subject to repeated reform attempts as different stakeholders advocate new solutions which give greater weight to their preferred constraints.

The process of constraint specification and integration are concurrent rather than sequential, for in attempting to integrate constraints, problem-solvers adjust the meanings of the constraints and their relative weighting, until they are satisfied with the degree to which they have been integrated. Satisfaction does not, of course, indicate an absolute level of integration, only that problem-solvers see the solution as good enough for now.

This example provides some insight into why research findings may not have the practical impact that researchers might wish for. The problem the school leader is trying to solve is not that of how to *apply* the research on use of school-wide assessment information. Rather it is how to satisfy a set of locally relevant constraints, *only some of which* are concerned with the design of more useful assessment systems. If researchers want to have more impact they need to do more than advocate for the constraints that are selected by their theory. They need, in addition, to investigate the shifts that are needed in the whole constraint set if their particular constraints are to be integrated with those that are important to the relevant practitioners.

A constraint set, the actions, routines, procedures or policies that satisfy it, and the consequences of those actions, constitute a theory of action (Argyris and Schön 1974). From the perspective of a practitioner, a theory of action specifies how to solve a practical problem. From the perspective of a researcher, a theory of action explains why a problem has been solved in a particular way.

Researchers who inquire into rather than bypass theories of action, reduce the research-practice gap by recognising

that practice is already theorised by those who engage in it and that we can explain practice by making these theories explicit. Knowledge of relevant theories of action also enables advocates of alternative policies and practices to predict the reaction to their suggested alternatives, for the constraints that have shaped existing practice act as evaluative standards against which practitioners will judge researchers' suggested alternatives. In essence, practitioners' reactions to researchers' theories and recommendations are the result of an interaction between two different theories. The research-practice gap is caused, not by some immutable difference between the two, but by the differing purposes and content of the theories that are typically employed by, on the one hand, researchers to investigate practice and, on the other hand, by practitioners to engage in it.

The theories of researchers typically privilege one or two of the set of constraints that practitioners judge to be relevant to a practical problem. For example, in research on streaming, or tracking as it is called in the US, I have previously described how some researchers have developed a stringent critique of the practice by showing how it is inequitable in terms of both the differential educational resources available to students in high and low tracks, and in terms of the long-term negative consequences of low track placement (Robinson 1998). Despite the consistent and high quality research findings on the equity implications of tracking, this research programme has had limited impact on the practice (Oakes 1992). A major reason is that, from the perspective of school leaders who track, equity considerations are just one of many relevant constraints in solving the problem of how to allocate students to teachers and programmes. School leaders also seek to satisfy such constraints as the desire of politically powerful parents for an accelerated programme, the need to meet enrolment targets, staff's beliefs that tracking is pedagogically more efficient and the level of capability of current staff in mixed-ability teaching. The research-practice gap arises because the theory of the researcher is about equity, not about how to give greater weight to equity within a context which requires attention to all these constraints, some of which may be in considerable tension with giving more weight to an equity constraint. The research-practice gap is reduced by researchers who discover the problem for which tracking is the solution and then show how an alternative solution can satisfy all the constraints on the problem.

Related Accounts of Theories of Action

My call for educational researchers to pay more attention to theories of action is not new, so some initial comparative exposition will help to clarify the nature of PBM. In 1974,

Argyris and Schön published a now classic text called, "Theory in Practice: Increasing Professional Effectiveness," in which they introduced the idea of a theory of action. They defined it as a theory of deliberate human behavior that takes the form of "in situation S, if you want to achieve consequence C, under assumptions $a_1 \dots a_n$, do A". From the perspective of agents, a theory of action is a theory of control – it tells them how to get what they want under given conditions. When a theory of action is attributed to an actor, group or institution, it serves to explain or predict behaviour.

Argyris and Schön also drew a distinction between two types of theory of action – *theories-in-use* and *espoused theories*. Theories-in-use describe the beliefs, values and assumptions that explain particular actions, together with the consequences of those actions. While theories-in-use are implicit and inferred from observations of action, espoused theories are based on reports of those same actions. Argyris and Schön drew attention to the frequent incongruence between the theory that informs action and the theory that is intended or reported to guide those same actions. They also draw attention to the defensive reasoning processes that can keep us blind to the incongruence between the two.

Both types of theories of action have a role in PBM. Inquiry into relevant theories-in-use yields explanations of current practice and important clues about how alternative theories will be evaluated. If the alternatives violate important constraints on current practice, then one can predict resistance to the adoption of the alternative. If the alternative is broadly consistent with it, then the alternative is likely to be adopted. This point has been made many times in the literature on research utilization, expressed most pithily perhaps by Nisbet and Broadfoot (1980) in their claim that research has an impact when it fits the way the problem is being framed at the time. Over time, accumulated research findings can change the way problems and questions are formulated (Hess 2008; Weiss 1979). In contrast, PBM is designed to test the possibility that a more adequate problem solution can be formulated during the life of a particular research project.

Inquiry into espoused theories is also important in PBM because agents' espousals provide one standard against which to evaluate the adequacy of a theory-in-use. Incongruence between theories-in-use and espoused theories can be a powerful motivator for change.

There are broad similarities between Argyris and Schön's concept of theories of action and Peter Senge's idea of a mental model (Senge 1990). The concept has also been taken into the policy world and used to identify the implicit assumptions being made by policy makers about the type of resources, incentives and interventions that are required to achieve policy goals (Hatch 1998; Weiss 1995).

There are some subtle but important differences between the components of a theory of action in PBM and in the work

of Argyris and Schön. For these authors, a theory of action comprises the relationship between actions, the values that are satisfied by the actions, and the consequences of the actions. In PBM, a theory of action comprises the constraints on the problem, the actions that satisfy the constraints, and the consequences.

In my prior discussion of constraints I explained that the concept of a constraint applies to any type of solution requirement, whether it be relevant values, beliefs, resource requirements, limits of capability, or other practices with which the solution must articulate. Argyris and Schön, on the other hand, are concerned only with value constraints because they have a model about how particular values inhibit or facilitate learning about the adequacy of one's theory. Their interest, in other words, is not so much in the specifics of how a particular problem is formulated, but in whether a theory of action incorporates those values which promote learning and feedback. Those theories of action that do not, are generically described as Model 1 and those that do, are generically described as Model 2 (Argyris and Schön 1974).

In summary, while inquiry into theories of action is a feature of both PBM and of the work of Argyris and Schön, the latter authors focus on value constraints and the extent to which they promote the detection and correction of error in the identification, formulation and resolution of problems. In PBM, by contrast, there is a much stronger focus on all the constraints that have shaped a problem's solution, and the result is a more task-specific and less generic account of problem solving. The two approaches to the analysis of theories of action are not incompatible, but they do require different types of analysis, with PBM focusing more on the content of constraints and Argyris focusing more on the extent to which a particular theory of action incorporates values which facilitate or inhibit feedback and theory revision.

Another group of scholars has also called attention to the importance of investigating the theories that are implicit in educational practice. Carr and Kemmis (1986), who were pioneers in the educational action research movement, also believe that the research-practice gap is attributable, at least in part, to the way researchers bypass theories of action:

The gaps between theory and practice which everyone deplors are actually endemic to the view that educational theory can be produced from within theoretical and practical contexts different from the theoretical and practical context within which it is supposed to apply. Consequently, because this sort of view is so widespread, it is hardly surprising that the gaps thereby created are interpreted as impediments that can only be removed by finding ways of inducing teachers to accept and apply some theory other than the one they already hold. If, however, it is recognised that there is nothing to which the phrase 'educational theory' can coherently refer, other than the theory that actually guides educational practices, then it becomes apparent that a theoretical activity explicitly concerned to influence educational practice can only do so by influencing the theoretical framework in terms of which these practices are made intelligible.

(Carr and Kemmis 1986, p. 115)

Carr and Kemmis are claiming that the gap between research and practice is caused by the mistaken belief that one can do educational research without investigating the theories that actually inform practice. Their advice for closing the gap is that we accept that *all* educational research is about theories of action, and that the only way to change practice is through changing such theories. While I agree with Carr and Kemmis's call for researchers to focus on the theories that inform practice, I do not agree that such theories are the *only* ones that qualify as educational. To equate educational theories with practitioners' theories is to tie research too tightly to the investigation of the *status quo*. One of the roles of educational researchers is to show how current practice reflects a particular formulation of an educational problem, and how different formulations may lead to more valuable educational processes and outcomes. If educational research is restricted to the investigation of theories of action, the result may be neglect of the type of theorising required to critically evaluate those theories and such critique is an essential component of PBM. For example, the researchers who described the differential resourcing and life chances of students in high and low high school tracks provided powerful resources with which to critique the practice of high school tracking. Without their research it would have been even more difficult to create a demand that the problem of how to allocate students to classes and programmes be re-solved. Unlike Carr and Kemmis (1986), I believe that the gap between research and practice is not caused by the development of theories that lie outside practice, but by the failure to connect any such theories with those that are currently operative in the practice situation.

I also disagree with Carr and Kemmis's somewhat sweeping assertion that engagement with theories of action is the *only* way to do research that makes a difference to practice. Researchers can, in alliance with relevant educational and governmental agencies, induce or coerce compliance with practices and policies which are in conflict with practitioners' current theories of action. The bussing saga in Boston during the late 1970s is a good example of a major educational change forced through by the power of judicial and governmental processes against the wishes of the majority of those directly involved. Carr and Kemmis's point should be that changing theories of action is a necessary condition of non-coercive change, rather than of change in general. This is the position taken in PBM.

Research for the Improvement of Practice: An Oxymoron?

Perhaps the most serious objection to the argument I am making about how to bridge the research-practice gap has been made by Martyn Hammersley in a series of articles about educational action research (2003–2004). For

Hammersley, research is distinguished by having the *exclusive* goal of “the advancement of knowledge, albeit knowledge relevant to educational policymaking and practice” (Hammersley 2003, p. 13). It can not, in addition, have an educative goal, in the sense of being geared directly to the goal of improving educational practice. If Hammersley is correct, then PBM cannot have both research and the improvement of practice as its twin goals. The first step in discussing Hammersley’s argument is to spell out what he sees as the basis of the incompatibility. The next step involves discussing the extent to which Hammersley’s arguments apply to PBM.

The first step in his argument is to establish the difference between inquiry and other sorts of activity such as teaching. Even though teachers may collect data to help them understand a teaching problem, or to evaluate a teaching strategy, such overlap between inquiry and teaching does not outweigh the considerable differences between the two activities. The differences are most clearly reflected in their differing goals – that of producing knowledge for inquiry and of educating children for teaching. The differing goals of the two activities mean that there will be times when “each demands a divergent course of action, and sometimes those courses of action will be fundamentally incompatible” (Hammersley 2004, p. 172). The practical import of the differing purposes is seen in how headteachers react to the numerous requests they receive for permission to conduct research in their school. Heads may judge that even the distribution of a questionnaire to staff is an unjustified intrusion into the time of teachers and a distraction from their primary focus on teaching and learning. In short, the educational purposes and activities are given priority over those of inquiry.

Hammersley’s next move is to argue that research is distinguished by resolving such tensions in favour of inquiry. This contrasts with what he calls inquiry-subordinated-to-another activity, in which in which such conflicts are resolved in favour of the other activity.

Hammersley makes a further distinction between academic and practical research. While the two types share an exclusive concern with the advancement of knowledge, and hence both qualify as research, they vary in the relative weight they give to validity and relevance.

Scientific research, while being concerned to produce knowledge which has human relevance, places primary emphasis on maximising the likely validity of the knowledge generated. By contrast, practical research is especially concerned with producing knowledge that is of direct use in practical activities; while yet still aiming to ensure a higher level of likely validity than knowledge from other sources (Hammersley 2003, p. 15).

In summary, Hammersley sees conflicts between the pursuit of knowledge and other practical purposes, such as educational improvement, as being resolved through a set of decision rules in which one purpose is given consistent

priority over the other. This decision rule is the basis of his typology of forms of inquiry.

My reply to his argument is two pronged. First, his category of practical research involves the same type of tensions as those found in inquiry-subordinated-to-another activity, and there can be no guarantee that they will be resolved in a manner that gives priority to inquiry values, because the researcher does not have control over how they are resolved. If researchers want to withhold certain educational programmes from groups of students, administer assessments, enter classrooms, or in any other way alter the routines of the school setting, it is a matter of negotiation with relevant practitioners about how much weight is given to inquiry values and how much to ensuring minimal disruption to the educational activities. This negotiation will be required whether or not the researcher intends to carry out practical research or action research. If I am right, the tensions between inquiry and the other activity happen in *both* practical research and inquiry-subordinated-to-another activity, and whether inquiry values are given priority is determined by context-specific negotiation about how to integrate methodological preferences and practical requirements.

Perhaps, however, Hammersley is saying that practical research is that in which, as a matter of fact, the tensions *have been resolved* in favour of research values and that if other values have taken priority, then the inquiry is not research but inquiry-subordinated-to-another activity regardless of the original intention of the researcher. The argument really turns on the extent to which research values are, as a matter of fact, reconcilable with other practical values. The very fact that Hammersley allows for practical research, which no doubt includes research in schools where there is an ever present duty to protect educational purposes, suggests that research values and educational purposes are sometimes reconcilable. This means that, on Hammersley’s own account, differences in broad institutional purposes do not preclude context-specific integration of educational and inquiry purposes. If that is true then he can not categorically claim that action research or any research that seeks improvement cannot, by definition, be research.

The second prong of my reply to Hammersley is to explain the features of PBM which promote an integration rather than opposition between research values and those of improvement.

Improving Practice by Improving Theories of Action

In the preceding section, I discussed the tension between the goals of inquiry and those of other practical activities such as teaching. In his 2003 article, Hammersley focuses on a more

Table 46.2 Informative versus educative action

Informative intention	Educative intention
Providing knowledge that one believes is relevant to people's concerns	Seeking to bring about some change in people's understanding, attitude or behaviour designed to satisfy a need on their part
Primary concern with the validity and relevance of the knowledge supplied	Primary concern with whether learning of the intended kind is taking place.
Communication of information is the sole act involved	Communication of information is only one of many acts which may be used in the process of education
Relatively open-ended audience	Specifically defined target audience

From Hammersley (2003, p. 18)

specific tension between the goal of research, which is to be informative, and the goal of improvement which includes the educative intentions of action researchers. Table 46.2 summarises the incompatibilities Hammersley sees between activities which have informative and educative intentions.

How an Educative Intent Can Compromise Validity

Hammersley describes inquiry motivated by an educative intent as designed to bring about a specific change in people's attitudes, understandings or actions. Although Hammersley does not identify exactly how the desire to bring about change undermines inquiry values, some insight into the tension can be gleaned from his description of educative intentions as being primarily concerned "with whether learning of the intended kind is taking place" (Hammersley 2003, p. 18). In contrast, informative intentions involve a "primary concern with the validity and relevance of the knowledge supplied" (*ibid.*). He further implies, in the following contrast between the two intentions, that an educative intention involves the exercise of control over the learning of others. "In the latter case [inquiry with an informative intention] there is no obligation or right, to control the way in which people derive practical or policy implications from the knowledge provided or to try to control what people do on the basis of it" (*ibid.*).

Hammersley's concern seems to be that the pursuit of improvement goals undermines inquiry into the desirability of the goal being pursued, the assumptions being made about how to achieve it or the anticipated consequences. In short, practical and political goals can undermine the pursuit of knowledge.

The strength of Hammersley's argument depends on his claim that one cannot simultaneously pursue valid knowledge and improvement. If improvement were to be pursued in the manner described by Hammersley, then I would be inclined to agree. His account implies that what counts as improvement has been prejudged, that what is to be improved has been predetermined by the researcher, and that unilateral control by the researcher is essential to ensure

that the intended learning has taken place. If this were the case, then the pursuit of improvement would indeed be incompatible with the pursuit of valid information. In the following, I show that the pursuit of improvement in PBM does not involve unilateral advocacy and control by the researcher, but collaborative inquiry into what counts as improvement and how to achieve it.

How an Educative Intent Need Not Compromise Validity

In PBM the improvement of educational policy and practice involves the improvement of the theories of action that are in the policy or practice. The obvious question at this point is, "What criteria are used to judge improvement"? What happens if the researcher and practitioners disagree about which is the better theory? In the previously discussed tracking example, one can easily imagine an equity-focused researcher arguing that his or her theory is preferable precisely because it gives greater weight to the equity constraint, and the financially-focused school administrator arguing that the current theory is preferable because it ensures the financial viability of the school.

Fair-minded evaluation can not privilege the values included in either theory – a set of meta-level criteria must be used that act as a neutral touchstone which is applicable to but independent of the value constraints included in the competing theories of action. The four criteria used in PBM to evaluate all theories of action are accuracy, effectiveness, coherence and improvability. They are explained briefly below and detailed examples of their use are available in Robinson (1993, 1998) and Robinson and Lai (2006).

Accuracy

A theory of action includes an account of the problem and how to solve it. Embedded in such accounts are many factual claims, and, given the power of practitioners to make decisions that materially affect others' lives, it is important that the accuracy of such claims is one of the criteria for judging the relative adequacy of competing theories of action. There are many types of factual claim – about what

happened in particular contexts, about what works in my class or school, and about the motivations and abilities of particular parents and students. Since people make many mistaken attributions about others' capacities and states of mind, these claims are often sources of inaccuracy.

Effectiveness

The second standard for evaluating the adequacy of a theory of action is effectiveness. This standard provides an internal critique of a theory of action by evaluating it against the values and other constraints that have been set on the problem. If a tracking solution was chosen, in part, because of teacher beliefs about how it would satisfy the preferences of powerful parents, then what does the evidence show about parental satisfaction? Are the consequences of a streamed mathematics programme turning out to be as efficient, in terms of improved test scores, as the staff predicted? This criterion involves more than goal attainment, because it assesses whether a goal has been attained without violating other constraints to an unacceptable degree.

Coherence

Practitioners are very aware that it is possible to solve one problem in ways that make it harder for them to solve others for which they are responsible. That is why taking a big picture approach, rather than a piecemeal problem-by-problem approach, is so important for the improvement of practice. The coherence criterion for evaluating theories of action considers the "big picture", for it asks whether the theory that has been used to solve one problem is compatible with high quality solutions to all the other problems for which the relevant practitioners are responsible (Walker 1987; Thagard and Verbeurgt 1998). This means that the constraints that have been set for a particular problem can be challenged, even if they are effectively met, if those constraints are too narrow or produce significant negative unintended consequences.

The coherence criterion provides a very tough test of a theory of action, but it is a critical supplement to the effectiveness criterion. Effectiveness simply means that the solution works in terms of what the problem solvers themselves take to be important. The coherence criterion goes beyond a self-referential evaluation and invites critical examination of the adequacy of the constraints set it. It is important to note, however, that the rationale for the critique is not just that the theory of action neglects constraints which the researcher thinks important. To admit such arguments would be to privilege the values or theories of the researcher over those of the practitioners, and neither form of privilege is acceptable in PBM (Robinson and Walker 1999). The argument must be couched in terms of why, even though effective, the consequences of the current solution cause other problems for which the practitioner has or ought to have some

responsibility. In summary, the coherence criterion for theory evaluation goes beyond what problem solvers themselves have currently taken as important and asks whether there are other values which should influence the choice of solution for the problem.

Improvability

The final standard against which to assess the relative adequacy of theories of action is that of improvability. This standard suggests that, given the complexity of educational problems and the uncertainty of our knowledge about how to solve them, it is important to develop theories of action that are testable and able to be revised to meet changing situations. Argyris's writing provides some specific guidance about how to assess the improvability of a theory of action. The headings "theory openness" and "theory closedness" in Table 46.2 are shorthand descriptions for the qualities of theories that which promote and inhibit theory improvement. The strategies which encourage error detection and correction include making claims public, along with the relevant supporting evidence and argument, and receptivity to disconfirming evidence and argument. The strategies on the right hand side of the table restrict feedback and theory improvement because key claims are not made explicit, supporting evidence and argument is not provided and what counts as disconfirming evidence or argument is neither clear nor sought.

One could argue that the improvability criterion becomes less important the more the content of a theory meets high standards of accuracy, effectiveness, and coherence. The problem with this argument is that we do not know for certain when our theories have this quality, and by presuming that they do, we are blind to the situations that would otherwise trigger their revision.

The contrary view is also possible, viz., that the criteria of accuracy, effectiveness and coherence are redundant, because a theory that meets the improvability criterion will eventually meet those criteria through the process of error detection and correction. This argument seems to ignore the systematic growth of knowledge and to portray theorists as starting afresh each time. It is highly inefficient, if not unethical, to practise (science or education) by ignoring prior relevant knowledge. Bad theories about the world, in education and the social sciences at least, tend to have at least as much force as good ones, because of their powerful self-fulfilling properties. The improvability criterion of theory appraisal is insurance on, rather than a substitute for, the other criteria.

To summarise the argument so far, Hammersley has claimed that the pursuit of improvement implies advocacy of particular values and that such pursuit is in considerable tension with the pursuit of inquiry. I have argued that the pursuit of improvement implies the pursuit of a better theory

of action and that PBM provides a theory-neutral set of meta-level criteria against which the relative merits of competing theories of action can be adjudicated. This process is compatible with inquiry as it does not prejudice what counts as improvement, and maintains an open inquiring stance throughout an improvement process. Indeed, the emphasis on theory competition both increases the chance of better research findings and of a better educational outcome than would have been the case if educative and informative purposes were pursued separately.

The Improvement of Practice Through “Open to Learning Conversations”

It is one thing to specify criteria for theoretical adequacy and quite another to use them in ways that protect research values. This is an important point given the assumptions made by Hammersley about how researchers are likely to promote their own values when advocating for improved policy or practice. If PBM is to overcome his objections, it needs a social relations of inquiry through which researchers can exercise influence without sacrificing continued inquiry into the validity and relevance of their preferred theories of action.

Improvement needs to be driven by a relationship that fosters the commitment of all involved to a shared and adequate theory of the problem and of how to resolve it. If practitioners find the critique of the researcher compelling, and an alternative theory more attractive than their current one, then their intellectual commitment, rather than the unilateral control of regulators and researchers, should drive the change process.

In this section I outline the interpersonal values and strategies that integrate informative and educative purposes. It is important to note that both purposes operate reciprocally – the researcher can inform and educate the researcher and vice versa. The interaction between the two parties may be face to face or mediated through electronic or written media. The model of interaction is called “open to learning” conversations and is a variant on Argyris and Schön’s well-known Model 2. (More detail on the theory and practice of these conversations, including transcripts and analyses of their use in action research contexts, is available in the work of Argyris and this author – Argyris et al. 1985; Robinson and Lai 2006.)

The key values in “open to learning” conversations are the pursuit of valid information and interpersonal respect. The first value implies that decisions about what to say and how to say it are based on their implications for learning about the validity of one’s own and others’ views about the problem. Such views are treated as hypotheses to be tested, rather than as assumptions to be taken for granted or imposed on others.

The second value is that of interpersonal respect. It implies that respectful involvement of those who have a stake in improvement promotes the sharing of relevant information, more rigorous testing of views, and more informed choices about what to do. A choice is informed when it is based on relevant information, where relevance is determined by each party’s beliefs about the factors that would make a difference to the decision. The combination of respect and the pursuit of valid information means that improvement is pursued in ways that promote ownership of decisions and a sense of responsibility for their implementation, monitoring and possible revision.

The type of collaboration envisaged under “open to learning conversations” differs from that described by some other writers on collaborative research processes (Lincoln and Guba 1985). The goal of collaboration is not merely to gain agreement but to gain what Phillips (1987) calls “warranted agreement” about the adequacy of theories of action. This means it is based on examination of relevant evidence and argument and consideration of plausible alternative interpretations, all accomplished through respectful virtual or actual conversations.

The quality of dialogue between researchers and practitioners is judged by the translation of these values into behaviour, and not merely by participants’ philosophical commitment, no matter how sincere. It is possible, therefore, for researchers who espouse respect and the pursuit of valid information to violate these values at the level of their theory-in-use. Adherence to the model outlined, therefore, requires the translation of these values into appropriate interpersonal skills.

There are three sets of interrelated skills involved in the conduct of an “open-to-learning” conversation. The first set of skills is about openness, which is the ability to say what one thinks or wants in a way that increases the chance that others can do the same. Problem solving is enhanced when all relevant information is put on the table, including that which is controversial, or potentially embarrassing to any of the parties.

The second set of skills are concerned with testing; the point of openness is not just to hear a range of views, but to express them in ways that increase the chance that errors can be detected and corrected. When people say why they hold their views, as well as what they are, then others learn more about the positions being advocated and can judge the soundness of the arguments and evidence that are claimed to support them.

The third set of skills concerns the way power and control are exercised by participants in the dialogue. The values of valid information and respect are served by bilateral (or multilateral) rather than unilateral control of the content and process of the conversation. When there are inequalities of status and/or expertise, the achievement of bilateral control

may require the more “senior” participants to facilitate the involvement of those who are more “junior”, through explicit facilitation of the views and reactions of the other party. A highly articulate researcher who lacks the willingness or ability to help a practitioner articulate their view of the problem, and their reaction to that of the researcher, jeopardises both the process of theory adjudication and the development of commitment to a shared view of the problem.

There is a considerable literature available on the challenges involved in learning how to employ “open-to-learning” conversations in situations where researchers have something at stake (Argyris and Schön 1974, 1978; Argyris et al. 1985; Robinson and Lai 2006). The tendency is to revert to persuasive advocacy instead of combining advocacy with genuine collaborative inquiry into the merits of what is being advocated. Hamersley is right to warn about how such advocacy can undermine research values. My argument here has been to show that models for the successful integration of informative and educative purposes do exist and that they make possible the development of both improved practices and improved research findings about practice.

PBM and the Pursuit of Research Generalisations

If the above arguments are accepted, then PBM offers a methodology through which both educative and informative purposes can be pursued simultaneously. It is possible, however, that the price of a methodology which is highly context-sensitive is that it will yield research findings that are not widely generalisable. In discussing this point it is important to remember that the type of research generalisation we speak of involves the description, explanation and improvement of practical problem-solving.

The generalisability of PBM findings turns on the similarity of problem types, and the extent to which practitioners in different settings use similar theories of action to solve them. With regard to similarity, many of the problems faced by teachers and administrators are set by the common institutional purpose of educating children under a specific governance, regulatory and resourcing framework. This ensures considerable commonality in the set of practical problems faced by educators. Whether or not they employ broadly similar theories of action in solving them, is an open empirical question.

Two strategies for addressing this question are available to PBM researchers. First, case by case analysis enables comparison of the constraint sets employed by different problem-solvers. This is the strategy employed by Robinson and Lai (1999) in their study of how Chinese university students completed their university assignments. In exploring the

reasons for the prevalence of copying, we discovered two patterns of constraints, and the explanations of copying they provided were substantially different from those that had been assumed by university administrators.

Fortunately, the slow accumulation of case study findings is not the only, or even the most powerful way of checking the generalisability of the findings of PBM research. The second way is by linking the pattern of constraints found in a particular context to a wider theoretical and empirical literature about the prevalence, antecedents and consequences of the pattern. For example, the generalisability of the pattern of constraints found in the two cases dealing with interpersonal dilemmas in my 1993 volume was established by linking those patterns to a well established literature on how people typically deal with the tension between giving tough messages and maintaining harmonious relationships.

In summary, although theories of action must be tailored to the specifics of the research context, their generalisability can be increased by replication and by linking them to more abstract and well-documented features of interpersonal and organisational theories of action.

Conclusions

There are substantial and important differences between research and other practical activities like teaching. While those differences contribute to the research-practice gap, methodological choices also contribute. Perhaps the most significant methodological choice, in this respect, is whether to engage or bypass the theories of action that inform the policy or practice that the researcher seeks to influence. Researchers who bypass current theories of action, rely on wider processes of dissemination to shift the weighting given to the constraints selected by their academic theories. Those who engage with relevant theories of action, seek a more direct form of influence.

From the perspective of the improvement of practice, there are several advantages in direct engagement with theories of action. First, engagement enriches our understanding of educational policy and practice, because theories of action reveal the problem for which the policy or practice is the solution. Second, it transforms differences between researchers and practitioners into theoretical rather than personal differences. The relative adequacy of their competing theories can then be collaboratively adjudicated and a revised theory of action developed that re-solves the problem.

The potential disadvantages of the pursuit of improved theories of action are that it could undermine the integrity of the processes required for valid research. Concern about the compatibility of research and improvement purposes has led Martyn Hammersley to argue that these purposes are in

frequent tension, and that resolution of the tension involves the inevitable subordination of one purpose to the other. In reply to Hammersley, I argued that PBM incorporates procedures for disconfirmation, theory adjudication and collaborative inquiry that make integration rather than subordination possible. The pursuit of improvement does not require sacrifice of research values, or at least not to any greater extent than is required to conduct research in any practical setting. In PBM, the search for improvement is a search for a better theory of action, and as such, the outcome can not be predetermined or unilaterally decided. The values of openness, validity and respect must guide the collaborative inquiry that is involved in determining, for any given context, what counts as improvement and how to achieve it.

Acknowledgement Portions of this chapter are revisions of material previously published in Robinson, V. M. J. (1993). *Problem-Based Methodology: Research for the improvement of practice*. Oxford: Pergamon Press.

Note on Contributor

Viviane Robinson is a Distinguished Professor in the Faculty of Education at the University of Auckland, New Zealand, where she is Academic Director of the Centre for Educational Leadership. She brings a background in organisational psychology and intervention to the study of leadership and school and organisational effectiveness. Her research interests also include the philosophy of social science and its implications for pursuing rigorous inquiry which contributes to the improvement of policy and practice. She has published numerous articles and books in such outlets as the *Educational Researcher*, *Educational Administration Quarterly*, *Journal of Educational Administration and Educational Management Administration and Leadership*.

References

- Argyris C, Schön D (1974) Theory in practice: increasing professional effectiveness. Jossey-Bass, San Francisco
- Argyris C, Schön D (1978) Organizational learning: a theory of action perspective. Addison-Wesley, Reading
- Argyris C, Putnam R, Smith D (1985) Action science. Jossey-Bass, San Francisco
- Carr W, Kemmis S (1986) Becoming critical: education, knowledge and action research. Falmer Press, London
- Fay B (1996) Contemporary philosophy of social science: a multicultural approach. Blackwell, Oxford
- Fusarelli LD (2008) Flying (partially) blind: school leaders' use of research in decision-making. In: Hess FM (ed) When research matters: how scholarship influences education policy. Harvard Education Press, Cambridge, MA, pp 177–196
- Goldhaber DD, Brewer DJ (2008) What gets studied and why: examining the incentives that drive education research. In: Hess FM (ed) When research matters: how scholarship influences education policy. Harvard Education Press, Cambridge, MA, pp 197–217
- Hammersley M (2000) Taking sides in social research: essays on partisanship and bias. Routledge, London/New York
- Hammersley M (2003) Can and should educational research be educative? *Oxford Rev Educ* 29(1):3–25
- Hammersley M (2004) Action research: a contradiction in terms? *Oxford Rev Educ* 30(2):165–181
- Hatch T (1998) The differences in theory that matter in the practice of school improvement. *Am Educ Res J* 35(1):3–33
- Hess FM (ed) (2008) When research matters: how scholarship influences educational policy. Harvard Education Press, Cambridge, MA
- Lincoln YS, Guba EG (1985) Naturalistic inquiry. Sage, Beverly Hills
- Nickles T (1981) What is a problem that we might solve it? *Synthese* 47(1):85–118
- Nickles T (1988) Questioning and problems in philosophy of science: problem-solving versus directly truth-seeking epistemologies. In: Meyer M (ed) Questions and questioning. Walter de Gruyter, Berlin, pp 43–67
- Nisbet J, Broadfoot P (1980) The impact of research on policy and practice in education. Aberdeen University Press, Aberdeen
- Oakes J (1992) Can tracking research inform practice? Technical, normative and political considerations. *Educ Res* 21(4):12–21
- Phillips DC (1980) What do the researcher and the practitioner have to offer each other? *Educ Res* 9(11):17–24
- Phillips DC (1987) Validity in qualitative research: why the worry about warrant will not wane. *Educ Urban Soc* 20(1):9–24
- Robinson VMJ (1993) Problem-based methodology: research for the improvement of practice. Pergamon Press, Oxford
- Robinson VMJ (1998) Methodology and the research-practice gap. *Educ Res* 27(1):17–26
- Robinson VMJ (2001) Embedding leadership in task performance. In: Wong K, Evers C (eds) Leadership for quality schooling: international perspectives. Falmer Press, London, pp 90–102
- Robinson VMJ, Lai MK (1999) The explanation of practice: why Chinese students copy assignments. *Int J Qual Stud Educ* 12(2):193–210
- Robinson VMJ, Lai MK (2006) Practitioner research for educators: a guide to improving classrooms and schools. Corwin Press, Thousand Oaks
- Robinson VMJ, Walker JC (1999) Theoretical privilege and researchers' contribution to educational change. In: Gaffney JS, Askew BJ (eds) Stirring the waters: the influence of Marie Clay. Heinemann, Portsmouth, pp 239–259
- Senge PM (1990) The fifth discipline: the art and practice of the learning organization. Century, London
- Thagard P, Verbeugt K (1998) Coherence as constraint satisfaction. *Cogn Sci* 22(1):1–24
- Walker J (1987) Democracy and pragmatism in curriculum development. *Educ Philos Theory* 19(2):1–10
- Weiss CH (1979) The many meanings of research utilization. *Public Admin Rev* 39(5):426–431
- Weiss CH (1995) Nothing as practical as good theory. In: Connell J, Kubisch A, Schorr L, Weiss CH (eds) New approaches to evaluating community initiatives. The Aspen Institute, Aspen, pp 65–92

Brian D. Haig

Abstract

In this response to Viviane Robinson's chapter, I highlight and comment on a number of key methodological features of her Problem-Based Methodology (PBM). I focus on its conception of methodology, the nature of research problems it adopts, the view of theory appraisal it articulates, and its treatment of research generalizations. In the course of my commentary, I make a number of recommendations for the possible further development of PBM. Among these is the suggestion that the core insights of the theory of explanatory coherence could profitably be incorporated into PBM.

Keywords

Problem-based methodology • Research problems • Methodology • Theory appraisal • Research generalizations

Introduction

Problem-Based Methodology (PBM) was developed by Viviane Robinson (1993) and extended for practitioner researchers in education in collaboration with Mei Kuin Lai (Robinson and Lai 2006). It introduced an array of important methodological ideas into the domain of action research and melded them into a coherent methodology that has considerable relevance for applied educational and social science researchers. Robinson's chapter in the present volume gives a sketch of PBM, advances a number of methodological reasons that help explain the research-practitioner gap, and concludes that one can employ PBM to conduct valid and rigorous research.

Robinson declares that educational research has contributed little to practice because it has failed to adopt a methodology that is firmly focused on practical research problems. She contends that educational researchers must adopt such a problem-based methodology if their research is

to impact effectively on educational practice. Paraphrasing Robinson (1993), PBM calls upon researchers to understand educational problems in terms of the theories of action of the relevant agents and the factors that sustain those theories. Resolution of an educational problem requires nothing less than the identification, evaluation, and possible alteration of those theories of action, so that they produce consequences no longer held to be problematic. Coming to understand and resolve a problem in this way requires the researcher to enter into a critical dialogue with practitioners in order that competing theories of the problem can be evaluated, and appropriate theories of action can be learned during the research process itself. Even these brief remarks might suggest that PBM weaves together a greater array of relevant methodological resources than is to be found in alternative accounts of action research.

In this short and selective essay, I highlight and comment on a number of key methodological feature of PBM. In so doing, I focus on its conception of methodology, the nature of research problems it adopts, the view of theory appraisal it articulates, and its treatment of research generalizations. In the course of my commentary, I make a number of suggestions for the possible further development of PBM.

B.D. Haig (✉)
Department of Psychology, University of Canterbury, Christchurch,
New Zealand
e-mail: brian.haig@canterbury.ac.nz

Aspects of Problem-Based Methodology

The Nature of Methodology

Although researchers sometimes use the term methodology as a learned synonym for method (and technique), the term is properly understood as denoting the general study of methods. Methods themselves are purportedly useful means for realizing chosen ends, whereby research methods are employed to meet various epistemic goals to do with the construction and use of knowledge. Robinson understands methodology in this proper sense, endorsing Abraham Kaplan's (1964) well-known characterization of methodology as "the study . . . of methods, and not the methods themselves" (p. 18).

In its study of methods, methodology is at once descriptive, critical, and advisory: It describes relevant methods and explains how they achieve their goals, it critically evaluates methods against their rivals, and it recommends what methods we should adopt to pursue our chosen goals. True to its name, PBM is concerned to illuminate inquiry procedures, in this case as they operate in the context of action research.

Traditional empiricism espouses an *a priori* conception of methodology in which the authority for methodological claims comes from non-empirical sources. By contrast, PBM adopts a naturalized approach to methodology. Such an approach uses the methods and results of science to fashion an understanding of methods themselves. In this regard, PBM is in fact a theory of inquiry, and the basic justification for its use involves judgements of its theoretical superiority over rival theories of inquiry. In explicating and justifying PBM, Robinson (1993) explicitly compares it with empiricist, interpretive, and critical conceptions of research methodology. In doing so, she employs the sensible tactic of sublation in which the sound elements of these alternative traditions are adopted and their implausible elements are discarded. The result is a richer methodology, but one that nevertheless remains coherent. A further feature of PBM's naturalism is seen in its formulation of two case studies, which do more than illustrate PBM; they are actually an integral part of its development and assessment.

Methodology is not the special domain of any particular discipline such as philosophy of science, or epistemology, or statistics, as is sometimes supposed. Rather, it is a central part of cognitive theory, where the latter is viewed as an interdisciplinary enterprise. The strong interdisciplinary makeup of PBM marks another feature of its naturalism; it crosses disciplinary boundaries to draw from organizational psychology, philosophical epistemology, aspects of cognitive science, as well as a miscellany of relevant methodological writings in education and the behavioural sciences.

In particular, PBM draws from the suggestive philosophical work of Thomas Nickles (1981) on the methodological idea of a research problem, which I consider immediately below, and the seminal work on theories of action by the organizational psychologists, Chris Argyris and David Schön (1996).

Research Problems

A number of authors (*e.g.*, Laudan 1977; Nickles 1981; Haig 1987) have stressed the value of viewing scientific inquiry as a problem-solving endeavour. This acknowledgment of the importance of research problems for inquiry contrasts with the orthodox inductive and hypothetico-deductive accounts of method, neither of which speaks of problem solving as an essential part of its characterization. PBM is particularly noteworthy because it identifies and makes use of a methodologically viable account of research problems.

In an effort to depict scientific inquiry as a problem solving endeavour, PBM employs a constraint-inclusion view of research problems (Nickles 1981). The idea of problems as constraints has been taken from the problem solving literature in cognitive psychology and deployed in a methodological role. Briefly, the constraint-inclusion theory depicts a research problem as comprising all the constraints on the solution to that problem, along with the demand that the solution be found. With the constraint-inclusion theory, the constraints do not lie outside the problem, but are constitutive of the problem itself; they actually serve to characterize the problem and give it structure. The explicit demand that the solution be found is prompted by a consideration of the aims of the research, the pursuit of which is intended to fill the outstanding gaps in the problem's structure.

Note that all relevant constraints are included in a problem's formulation. This is because each constraint contributes to a characterization of the problem by helping to rule out some solutions as inadmissible. However, at any one time, only a manageable subset of the problem's constraints will be relevant to the specific research task at hand. Also, by including all the constraints in the problem's articulation, the problem enables the researcher to direct inquiry effectively by pointing the way to its own solution. In a very real sense, stating the problem is half the solution!

The constraint-inclusion account of problems stresses the fact that in good scientific research problems typically evolve from an ill-structured state and eventually attain a degree of well-formedness such that their solution becomes possible. From the constraint inclusion perspective, a problem will be ill-structured to the extent that it lacks the constraints required for its solution. Because our most important research problems will be decidedly ill-structured,

we can say of scientific inquiry that its basic purpose is to better structure our research problems by building in the various required constraints as our research proceeds.

It should be emphasized that the problems dimension of PBM research is not a temporal phase to be dealt with by the researcher before moving on to other phases such as observing and hypothesizing. Instead, the researcher is dealing with scientific problems all the time; problems are generated, selected for consideration, developed, and modified in the course of inquiry.

In using PBM, there will be numerous problems of varying degrees of specificity to articulate and solve. For example, the successful detection of an empirical regularity produces an important new constraint on the subsequent explanatory efforts devised to understand that constraint; until the relevant regularity, or regularities, are detected, one will not really know what the explanatory problem is. Of course, constraints abound in theory construction. For example, constraints that regulate the generation of new explanatory theories will include methodological guides (*e.g.*, give preference to theories that are simpler, and that have greater explanatory breadth), aim-oriented guides (*e.g.*, theories must be of an explanatory kind that appeal to latent causal mechanisms), and metaphysical principles (*e.g.*, social psychological theories must acknowledge humankind's essential rule-governed nature).

The importance of research problems, viewed as sets of constraints, is that they function as the "range riders" of inquiry that provide PBM with the operational force to guide inquiry. The constraints themselves comprise relevant substantive knowledge as well as heuristics, rules, and principles. Thus, the constraint inclusion account of problems serves as a vehicle for bringing relevant background knowledge to bear on the various research tasks that comprise PBM.

This constraint-inclusion account of problems is particularly suited to educational research where problems that confront us are typically ill-structured. It is also valuable to inquiry generally, because it is able to help explain how inquiry is possible as well as provide guidance for the action researcher's behavior.

Theory Appraisal

According to PBM, an important part of solving educational problems involves the evaluation of reconstructed theories of action. In this regard, Robinson (1993) identifies four relevant criteria of theoretical adequacy. These are explanatory accuracy, effectiveness, coherence, and improvability. The criterion of explanatory accuracy is concerned with how well a theory causally explains the phenomenon or phenomena of interest. Effectiveness is a pragmatic criterion that focuses on whether a theory of action produces intended

consequences without violating important constraints in the problem. The third epistemic criterion, coherence, refers to the consistency of our theory of the problem with other justifiably accepted theories, while the improvability criterion is concerned with the development of theories in respect of their openness to revision. What we have here is a multicriterial perspective on theory evaluation that goes beyond empiricism's narrow focus on empirical adequacy, which is generally understood as predictive success. As Robinson argues, the underdetermination of theories by empirical evidence requires the employment of additional criteria like these in order to make theory evaluation a more determinate affair. It is a strength of PBM that it can deal with this underdetermination problem.

A number of scientists and philosophers of science understand the evaluation of theories to be an abductive undertaking involving inference to the best explanation, whereby a theory is accepted when it is judged to provide a better explanation of the evidence than its rivals. One highly promising approach to theory evaluation takes inference to the best explanation to be centrally concerned with establishing explanatory coherence (Thagard 1992). The theory of explanatory coherence maintains that the propositions of a theory hold together because of their explanatory relations. Relations of explanatory coherence are established through the operation of seven principles: symmetry, explanation, analogy, data priority, contradiction, competition, and acceptability. The determination of the explanatory coherence of a theory is made in terms of three criteria: explanatory breadth, simplicity, and analogy. Each criterion is embedded in one or more of the principles. The criterion of explanatory breadth, for example, which is the most important for choosing the best explanation, captures the idea that a theory is more explanatorily coherent than its rivals if it explains a greater range of facts or phenomena.

I think that the core insights of the theory of explanatory coherence could be incorporated into PBM with profit. It is an integrated, multi-criterial account of theory appraisal that makes systematic decisions about the best of competing explanatory theories. It gives an operationalized account of PBM's criterion of explanatory effectiveness, and it goes beyond its notion of coherence understood as consistency. In addition, the allied computer programme implements procedures for constraint satisfaction, and these constraints could be profitably recast in problem solving language.

Research Generalizations

Being a methodology for action research, PBM promotes research that is highly context-sensitive. A commonly mentioned strength of action research is that it provides rich information about the particular phenomena being

investigated. As a consequence, action research is also said to have limited generality or external validity. Robinson (2013), however, provides empirical evidence from her own research to suggest that knowledge generated by teacher-researchers in one setting can be applicable to other similar settings. She maintains that the findings of PBM research will be highly generalizable to the extent that they solve similar problems in similar ways, which in her case involves teacher-researchers employing similar theories of action. Robinson is surely right in suggesting that generalizability will only be achieved empirically as the result of the patient accumulation of findings from a number of case studies. Relatedly, it is a moot question whether or not broad, stable generalizations are obtainable in educational research generally more generally. Despite expressions of pessimism in some quarters about this, meta-analyses have shown that useful empirical generalizations are attainable in educational and behavioural research (Gage 1996). We have here, then, suggestive empirical evidence from two different quarters for the claim that empirical generalizations are obtainable in educational research.

Normally in science, the press for generalization is confined to empirical phenomena, that is, to robust empirical regularities. Theories, by contrast, are concerned with explaining phenomena (Woodward 1989), and are said to be better than their rivals to the extent that they explain more facts or classes of facts. Robinson signals a break with this tradition, for she sees the pursuit of generalizations using PBM research as covering not just its descriptive tasks, but also its explanatory deliberations, as well as efforts to improve the solution of practical problems. The common denominator in these different tasks is the similarity of problem types and the extent to which research practitioners employ similar theories of action. However, this raises the question of whether *prima facie* different theories, for example, are really just instantiations of the same theory type. This is a task for the further development of PBM. Also, it would be instructive to see whether or not Thagard's (2000) notion of explanatory breadth could usefully be used as a measure of the generalizability of a theory, the idea being that the more different classes of facts a theory successfully embraces, the greater is its generalizability. Whatever the outcome of such possible future investigations, it is reassuring that generalizability for PBM remains a naturalistic notion, and does not attempt to grapple with imprecise replacement notions such as transferability.

Conclusion

PBM is an innovative, comprehensive, and useful methodology. It is arguably the best extended methodological treatment of action research currently available. Action researchers will find it an instructive source of guidance, and might want to adapt it for special use where appropriate. Methodologists should find it rewarding to contribute to its ongoing development, and I have pointed out a number of ways in which this might be done.

Note on Contributor

Brian Haig obtained his MA from the University of Otago, and his PhD from the University of Alberta. He is professor of psychology at the University of Canterbury, New Zealand, where he teaches research methodology and theoretical psychology. His research interests centre on the theoretical foundations of behavioural research methods, and other issues to do with the nature of psychological science.

References

- Argyris C, Schön DA (1996) *Organizational learning II: theory, methods, and practice*. Addison-Wesley, Reading
- Gage NL (1996) Confronting counsels of despair for the behavioral sciences. *Educ Res* 25(3):5–15, 22
- Haig BD (1987) Scientific problems and the conduct of research. *Educ Philos Theor* 19(2):22–32
- Kaplan A (1964) *The conduct of inquiry: methodology for behavioral science*. Chandler, Scranton
- Laudan L (1977) *Progress and its problems: towards a theory of scientific growth*. University of California Press, Berkeley
- Nickles T (1981) What is a problem that we might solve it? *Synthese* 47(1):85–118
- Robinson VMJ (1993) *Problem-based methodology: research for the improvement of practice*. Pergamon Press, Oxford
- Robinson VMJ (2013) Reducing the research-practice gap through problem-based methodology. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 341–352
- Robinson VMJ, Lai MK (2006) *Practitioner research for educators: a guide to improving classrooms and schools*. Corwin Press, Thousand Oaks
- Thagard P (1992) *Conceptual revolutions*. Princeton University Press, Princeton
- Thagard P (2000) *Coherence in thought and action*. MIT Press, Cambridge, MA
- Woodward J (1989) Data and phenomena. *Synthese* 79(3):393–472

Stuart McNaughton

Abstract

Robinson's chapter has provided a compelling analysis and a persuasive solution to the 'gap' between researchers on the one hand and practitioners and policy makers on the other. The gap is problematic to both communities and reduces our effectiveness. She proposes a methodology to reduce the gap by promoting engagement with what she calls 'theories of action', through a problem-based methodology (PBM). This will increase our mutual influence and how to solve it. There is evidence that if we get the solution right through the PBM process our combined effectiveness indeed will increase; despite the usual arguments against this because the phenomena are just too complex for our tools. But there is still more to do in thinking about the solution on the ground. The suggested further directions include studying cases where the gap was reduced and educational effectiveness can be shown. This would enable us to learn more about how discourse practices and communication are managed to create mutual meaning. A second usual argument against such an agenda is that research would be too compromised, and would risk becoming politicised. The PBM proposal, rather than leading to compromises and reduction in our effectiveness is likely through its focus on real world problems to enable us to build even more effective science associated with school change.

Keywords

Problem solving • Compelling cases • Discourse practices • Problem based methodology (PBM) • Evidence

Viviane Robinson (2013) asks a very important question, how to reduce the gaps between researchers on the one hand and practitioners and policy makers on the other, to increase our mutual influence. The gap is problematic to both communities. Of the possible questions and challenges her chapter poses, there are two I will address in this commentary. They are related to the initial part of the chapter in which Robinson outlines the usual range of reasons for why educational research has limited impact on policy and practice and her proposal for a methodology to reduce

the gap by promoting engagement with what she calls 'theories of action', through a problem-based methodology (PBM).

Robinson outlines two reasons typically proposed for the limited impact of research on educational policy. One is that the phenomena are just too complex, contingent and contextualised to fit into neat policy recommendations. The second is that research would be too compromised, and would risk becoming politicised with an agenda to inform practice through policy. Her analysis (and rejection) of these two reasons raises two queries. The first is something that her chapter is not tasked to deal with directly but bears on the question for validating the conditions under which her alternative proposal of PBM might work. It is the empirical question: What do variations in the so-called gap look like?

S. McNaughton (✉)
Faculty of Education, University of Auckland, Auckland, New Zealand
e-mail: s.mcnaughton@auckland.ac.nz

I would expect that there is variation between countries, between districts and even perhaps at more local levels in the degree to which researchers and practitioners and policy makers take notice of each other. The search for outliers or for exceptions to the rule provides a systematic way of examining the processes and conditions involved in making or reducing the gap. For example, one notable success story in which policy, practice and research came together is in the design and implementation of the Reading Recovery programme for children making low progress after a year at school (Clay 1993). The programme is extraordinarily successful, in two senses. It is a successful intervention programme as attested to by the US Dept of Education on its Clearinghouse web site. It is the gold standard against which other early literacy interventions might be compared. The second sense of its success is that it has been developed and redeveloped in educational systems in six countries all of whose local contexts vary in terms of age of entry to school, in the types of books used to teach early reading, the qualifications of the teachers and other idiosyncratic aspects of schooling. In 2005, 11,000 NZ children were taught and millions have been taught worldwide.

What were the conditions for its development as an intervention and for the policy that recognised its significance and provided conditions for regional, national and international roll out? One part is that it was compelling and committed science involving initially an intensive descriptive phase in which Clay (1993) first studied demonstrably effective teachers to determine the features of their expertise. This phase focused on understanding effective teachers on the ground and theorising their practice with them. A second experimental phase tested the model in real world settings for classrooms and under different conditions (for example was it effective with children from different ethnic and cultural groups). She then moved to optimisation nationally in New Zealand, working to develop a policy context and an ongoing training regime that would mean the intervention was bedded in, across the unique features of both urban and rural schools.

Clay (1993) has commented on the policy relationships needed, especially in a global context, given the tension between guaranteeing a research based intervention but being flexible enough to take on board new findings and adapt to local context. She deliberately adopted a systemic perspective considering the replication, sustainability and roll out as a problem to be solved with policy makers. Examples include how to design a cost effective national system which, in the case of New Zealand, covered isolated rural schools as well as urban schools. She noted that from the first point at which a problem was identified in New Zealand, the lack of any early intervention for low progress readers, she engaged with policy makers in communicating her designs and emerging solutions.

It is an ongoing dialogue. National conferences of Reading Recovery in the United States have a strand for policy makers at local and regional levels. Perhaps in this example one can see the forerunner of that part of the PBM proposal that identifies the discourse setting within which researchers and policy makers engage as essential to solving the gap and the obvious implication in Robinson's proposal that this requires time and repeated exchanges focused on real world problems. In terms of the reasons given for not reducing gaps one can argue that this didn't compromise Clay's (1993) science; on the contrary it sharpened it.

The Reading Recovery approach was also very like the strategies recommended in a recent presidential address to the Society of Research in Child Development in which Aletha Huston (2008) identified two major actions that developmental scientists can take to make a difference. One is to strengthen the scientific base by taking 'being useful' seriously. This would involve improving the quality of the evidence, replicating and accumulating consistent findings and considering realistic actions in research designs. A second front is to work on communication; notably addressing many audiences including policy makers at regional and local levels as well as federal levels, conveying the value of the science (essentially an educative function), being ready when opportunities to talk with and influence policy makers occur, and participate in the policy process by acting on advisory groups and in other fora.

The significance of ongoing useful communication is exemplified in Clay's (1993) work and signalled in Huston's (2008) comments. Examining exceptions where there is less of a gap and where successful outcomes can be identified is one tactic to examine the properties of that communication. Robinson proposes a more direct methodological solution to which I will turn next. But her response, to use a PBM approach needs also to consider the question of forms of communication. Researchers belong to communities of practice with their own norms for discourse. In terms of the complexity argument the question is what would effective representation and communication of complexity to policy makers look like? In terms of the PBM proposal the question is one about the necessary properties of knowledge and discourse that researchers need to have to enter into PBM encounters which would guarantee effectiveness in working with policy makers. How does one ensure that research-based ideas are not lost in translation between the communities?

A way of tidying up our reporting was suggested recently by Shonkoff (2000) and is echoed in Huston's (2008) comments about communication. Shonkoff (2000) commented on how the transmission of knowledge from the academy to the domains of social policy and practice is a formidable task and could be facilitated by a simple taxonomy. The taxonomy differentiates established knowledge

from both reasonable hypotheses and (as yet) unwarranted assertions. The suggestion is that we should present our findings with these sorts of tags.

The general idea is helpful. It suggest that we make sure we differentiate those things about which there is pretty general agreement from those things that are more tentative, although there is some supporting evidence or strong theoretically base. And differentiating both of these from ideas which are still to be tested. Meta-analytic tools add quantitative guidelines to aid this sort of translation of our discourse. They too can provide a means for us qualifying our representations in ways that are meaningful and communicable.

However, despite these tools for and new approaches to our discourse practices, relying on these would be rather naïve. For example, agreements between researchers depend on shared beliefs about criteria of believability and acceptability of methods and analyses. If a small group of researchers who rely on a limited set of criteria are recognised as the experts who convey consensus or if the limits to meta-analysis are not themselves recognised (see for example, the debate about ‘what works’ in Slavin (2008a), and then the responses: Briggs 2008; Chatterji 2008; Dynarski 2008; Green and Skukauskaite 2008; Sloane 2008; and Slavin 2008b) then loss of some richness in evidence and potentially useful knowledge may result. Nevertheless, these approaches and tools provide us with some means for coping with the representations of complexity.

The second comment addresses the usual response that research would be too compromised, and would risk becoming politicised with an agenda to inform practice through policy. Robinson’s innovative approach to solve the gap problem is to use the PBM approach. This is a compelling methodology which is designed to reveal and test the theories that both policy makers and researchers hold about real world problems. It has a detailed procedure for getting behind espoused theories and has rules for engagement that develop respect for the testing of different positions.

Robinson locates the PBM in the identification and solution of what can be called real world problems. It is this focus that undermines the usual criticism that our science necessarily would be compromised by focusing on what is important to policy makers.

Real world problems are the practical ones that practitioners face the solutions to which can have both generic components but also have substantial local and contextualised constraints. For example, a problem facing urban schools serving diverse language and cultural groups from poorer communities is the need to know how to make reading comprehension instruction more effective (Lai et al. 2009). The generic aspects to solutions draw on shared theoretical and empirical knowledge. But in any one set of schools in any district the question might need to address

how to be more effective in the face of local conditions such as high staff turnover, high student transience or changing demographics. Robinson argues that systematic identification and analysis of the constraints is needed in order to solve real world problems. This requires capabilities to contextualise and problem solve.

This argument is very similar to one recently proposed for medical science. Atul Gawande (2007) argues that medical practice requires a science of problem solving which deals with local real world problems. To solve issues of superbugs in hospitals for example, one certainly needs one part of the science to be about the properties of the bacteria involved. But a large part of the solution is knowing about changing the human behaviour which determine hygiene standards.

From both Robinson and Gawande (2007) comes the claim that rather than there being a risk to our science if we engage in real world problems, if we don’t engage our science is very limited. An even stronger argument is that the need to solve important questions that carry both theoretical and policy implications means we have to be even smarter. Schools and classrooms and their communities are messy systems and our research traditions are littered with examples of naïve generalisations and extrapolations from short term, unfamiliar and highly controlled contexts to these open systems (Bronfenbrenner 1979).

The final comment introduces some experimental support for Robinson’s proposal. In a replication series of studies involving some 10,000 students across more than 50 schools, a group of researchers in partnerships with school practitioners, their communities and policy personnel have focused a research and development programme on a pressing and longstanding educational challenge in New Zealand. It is to increase instructional effectiveness in primary schools so that achievement levels in reading comprehension for Māori students’ (from the indigenous community) and Pasifika students’ (from immigrant communities from the Pacific islands) achievement can be accelerated to match national distributions of achievement (Lai et al. 2009; McNaughton and Lai 2009). One of the major mechanisms developed in the research and development model has been a form of PBM. At the core of the three-year model is inquiry using evidence about teaching practices and achievement in which theories about instructional effectiveness and learning are experimentally tested through a professional development process. The practitioners and researchers have had important success in raising achievement levels to national averages in the face of a long-term seemingly intractable problem. Not only are effective solutions possible but important discoveries about properties of instruction have flowed from real world problem solving.

Robinson has provided a compelling analysis and a persuasive solution to the ‘gap’ and how to solve it. There is evidence that if we get the solution right our combined effectiveness will

increase. There is still more to do in thinking about the solution on the ground. I have suggested further directions here. One is to study cases where the gap was reduced and educational effectiveness can be shown. What can we learn from these cases about how discourse practices and communication are managed to create mutual meaning? The PBM proposal, rather than leading to compromises and reduction in our effectiveness is likely through its focus on real world problems to build even more effective science associated with school change.

Note on Contributor

Stuart McNaughton is Professor of Education at the University of Auckland and Director of the Woolf Fisher Research Centre. His research has focused on literacy and language development including processes of education, socialisation and culture, and on the design of effective instruction and educational programmes for culturally and linguistically diverse populations. He has been a member of the New Zealand government appointed Literacy Task Force and chair of the New Zealand Literacy Experts Group. He has consulted with policy agencies in New Zealand, Australia, Canada and Singapore, on instructional change, curriculum design and research and development collaborations with schools.

References

- Briggs DC (2008) "Comments on Slavin": synthesizing causal inferences. *Educ Res* 37(1):15–22
- Bronfenbrenner U (1979) *The ecology of human development: experiments by nature and design*. Harvard University Press, Cambridge, MA
- Chatterji M (2008) "Comments on Slavin": synthesizing evidence from impact evaluations in education to inform action. *Educ Res* 37(1):23–26
- Clay M (1993) *Reading recovery: a guidebook for teachers in training*. Heinemann, Portsmouth, NH
- Dynarski M (2008) "Comments on Slavin": bringing answers to educators: guiding principles for research syntheses. *Educ Res* 37(1):27–29
- Gawande A (2007) *Better: a surgeons notes on performance*. Profile Books, London
- Green JL, Skukauskaite A (2008) "Comments on Slavin": becoming critical readers: issues in transparency, representation, and warranting of claims. *Educ Res* 37(1):30–40
- Huston A (2008) From research to policy and back. *Child Dev* 79(1):1–12
- Lai M, McNaughton S, Amituanai-Tolosa M, Hsiao S, Turner R (2009) Can sustained acceleration of achievement in reading comprehension be achieved through schooling improvement? *Read Res Quart* 44(1):30–56
- McNaughton S, Lai M (2009) A model of school change for culturally and linguistically diverse students in New Zealand: a summary and evidence from systematic replication. *Teach Educ* 20(1):1–21
- Robinson VMJ (2013) Reducing the research-practice gap through problem-based methodology. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 341–352
- Shonkoff JP (2000) Science, policy, and practice: three cultures in search of a shared mission. *Child Dev* 71(1):181–187
- Slavin RE (2008a) What works? Issues in synthesising educational program evaluations. *Educ Res* 37(1):5–14
- Slavin RE (2008b) "Response to comments": evidence-based reform in education: which evidence counts? *Educ Res* 37(1):47–50
- Sloane F (2008) "Comments on Slavin": through the looking glass: experiments, quasi-experiments, and the medical model. *Educ Res* 37(1):41–46

Part IV

Legitimizing Research in Education

Paul Hart

Abstract

This Part of the *Companion* examines a range of questions associated with conventional to radical principles of research legitimation given recent questions about the quality and qualities of educational research. The introductory essay examines the scope and impacts of such debates in relation to methodological positions, arguing that a requisite variety of values and logics has become essential to sustaining the vision and practice of educational inquiry, particularly given complex practical to theoretical considerations associated with undertaking the research enterprise. Contributions that follow illustrate how these concerns play out at the interplay of theoretically-rich and evidence-based priorities for educational research; the politics and ethics of legitimation amongst diversified research communities, regulators and users; and the development, instigation and contestation of quality criteria within and beyond the fields that educational researchers appeal to, as they account for their decisions and practices. Questions of legitimacy and quality in educational research are shown to be inescapably tied to matters of discourse, subjectivity and authority in meaning making. The burden of the essay, and subsequent chapters and commentaries, is to argue the need for critical reflection on standards, standardizations and standings, particularly as the merit, character, calibre and excellence of research undertakings are scrutinized, be that in terms of their theoretical rigor or their pragmatic outcomes and impacts.

Keywords

Crisis of legitimation • Research quality • Epistemology • Ontology • Methodology

Issues That Persist

Discussions about research quality as it relates to legitimacy have spanned a number of crises of confidence across the history of educational research (Lagemann 2000). They have intensified in recent decades following debates in the wake of reports from government-sponsored initiatives in Britain (e.g., Hargreaves 1996; Hillage et al. 1998; Tooley and Darby 1998) and the United States (e.g., Feuer et al. 2002; Shavelson and Towne 2002). Although Thomas and Gorard

(2007) were able to report, for example, the general feeling amongst participants at a thematic seminar series funded by the ESRC's *Teaching and Learning Research Programme*, that 'the discussion has moved on', political acts such as the issuing of reports have tended to have lasting effects on fields of inquiry, particularly during periods of change and uncertainty. In light of these ongoing developments, questions about research quality and legitimacy remain timely and will continue to form a crucial part of discussions amongst researchers, policy makers and education professionals. We believe that both the level and breadth of scholarship found in this Part of the *Companion* will contribute key insights into issues of legitimation and legitimization that must remain active debates in educational research circles, given deep philosophical differences about what

P. Hart (✉)
Faculty of Education, University of Regina, Regina, SK, Canada
e-mail: Paul.Hart@uregina.ca

should constitute educational research and what should count as legitimate.

The purpose of this Part of the *Companion* takes its lead from questions of ‘what counts’ as quality in educational research. How do we come to ‘know’ what is ‘good’ educational research? What qualities inspire superlatives such as ‘excellent’ or ‘outstanding’? What do we mean? Who says? And with what authority? The contributors addressing issues of legitimation in this Part represent a range of views, epistemological positions and philosophical stances on what counts – as knowledge, as evidence, and as research. It is in pursuing ongoing conversations that represent diverse views on issues, such as relevance, politics and ethics, that this introduction is intended to initiate reflection and discussion that opens up debate about what counts as ‘quality’ and ‘legitimate research’ in education. Commentaries following each of the main chapters illustrate this kind of interchange.

Locating Issues in the Discourse

As explored in the first Part of the *Companion*, until quite recently, a combination of naturalism, empiricism, and positivism has dominated the epistemological framework for both the natural and social sciences. However, within the last 40 years or so, understandings of the complexities of epistemological bases of social and educational research have advanced across ‘paradigms’ that work beyond these empirical analytic boundaries. More complex notions of and theoretical perspectives and multiple research traditions have emerged, drawing on anthropological, philosophical and sociological considerations, and these continue to evolve and proliferate. Such developments in the philosophy of social science, for example, have, according to Seale (2004), left educational research practitioners unprotected by the epistemological assumptions and principles that once served to underwrite ‘standards’ and ‘quality’.

Why is this? Despite Kuhn’s seminal work on paradigms in the natural sciences, a wide range of commentators on educational research have both referred to and contested the notion of an incommensurability amongst epistemologically distinct theoretical perspectives concerning the relative merits of inquiry across different traditions and research programmes. Contributors to this Part of the *Companion* argue in various ways and from different positions that educational research should explore practical, theoretical and methodological implications of an epistemological (and by implication, ontological/axiological) pluralism precisely because educational issues themselves are as much about different ways of learning/knowing or being learned or a knower, as about contestations about resources, people or power relations. Each chapter, in its own way, addresses the implications of multiple perspectives on the field

of educational research, that together, work to unsettle taken-for-granted or commonsense assumptions about what counts as quality as this relates to the legitimation of inquiry. The contributions seeks to engage educational research by opening up spaces of resistance to talk of hermetically sealed paradigms, challenging ‘the givens’ detected or contested across educational research from other perspectives, and thus moving beyond self-defining limits created by methodological categories. In other words, there is a core theme of deconstructing conceptualizations of methodological priorities and discourses about educational research, revealing these to be bounded, if not rigidly setting limits on how legitimate knowledge is produced.

Our collective interest in presenting different positionings within a *Companion* that is purposefully not organized around the methodological perspectives of many research handbooks, is to raise such questions of the relative merits of judgments about quality of research accounts within different traditions. Positivist-oriented researchers, for example, seem most likely to link ‘genuine’ knowledge with the rigors of methodological precision, whereas qualitative-oriented interpretive inquirers advocate epistemological diversity where knowledge becomes warranted on the basis of adequacy of method applied within particular methodological frames (e.g., ethnography, phenomenology, narrative inquiry) and/or theoretical perspective (e.g., feminist, indigenous, queer theory, cultural studies) that are agreed to intersubjectively amongst communities of practice. Critical approaches tend toward more participatory forms of inquiry (often ideologically inflected) where participants judge for themselves what matters within their active construction of educational and change processes (i.e., the immediate integration of knowledge-in-action (Schön 1983)). Post-critical forms of inquiry, similar to critical forms, are interested in marginalized groups excluded from political power and focus on the role of language in producing meaning. Post-informed approaches, however, also emphasize instabilities of language and learning, including uncertainties in human interaction in educational settings and experiences, pursuing that which is generative of new and unexpected meanings about education that are situational and contextual rather than fixed over time and audience.

Valuable ideas derive from each of these positionings and perspectives, of course, but the issues about being or becoming ‘post-paradigmatic’ go much deeper. Communication is not unproblematic and questions about our research in education, involving rejection of cultural certainties, points to ideological difference concerning foundational questions about science, technology, economic growth, political systems and quality of life. It is not difficult to see that these can quickly become political topics and debates. That is, questions of research legitimacy and legitimation soon become enfolded with questions of power. The charge can

be crystallized as follows: whoever controls knowledge exerts political control, and thus changing the resourcing, accessibility and frames of reference for a research base inevitably impacts those for the world's most significant 'commodity', i.e. knowledge.

It is equally unsurprising that we have many claims about and versions of what constitutes knowledge and quality in educational research. Consider what happens when we recognize the cultural construction of ontologies (i.e., what counts as reality). Were these previously rendered invisible by dominant discourses, and does recognizing them problematize those discourses/structures/processes? Does this take us outside the boundaries of traditional academic discourse/structures (i.e., the 'legitimate ways of knowing')? Might this then also render other ways of knowing, other knowledge, illegitimate (as the U.S. government has with the Scientific Research in Education legislation) or at least require we ignore them, or devalue or undermine them? Do we have a crisis of legitimation where a particular ontology (i.e., realist ontology) sets the definitional categories, boundaries, or limits on how 'legitimate' knowledge is (can be) constructed?

Questions of Epistemology

Academic discourse has a history of attempting to represent research-based knowledge by using applied science forms of 'intimate detachment' to achieve objective data, in the hope (naïve or tempered?) that it has a more universal application. As contributions to this Part of the *Companion* show, educational research also reflects this inheritance within the modernist predilection for a kind of legitimacy that derives from foundational assumptions about the virtues of truth, beauty and justice in scholarly exercises. Such ideals have come down to us as part of a culture of inquiry governed increasingly by expectations associated with 'modern science' as a common framework for resolving claims. Deliberations about appropriate forms or legitimate 'means' to certain knowledge have been strongly influenced by such historical/cultural frames, but it seems only to have traction on our practices and discourses if we entertain the notion of a 'postmodern' condition or science. Why, again, might this be? As is argued throughout this Part, it is in coming to rely too unreflexively on these frames that educational researchers risk losing touch with the theoretical roots and challenges that form the underpinnings of the most recent rounds of contestation and debate.

In the face of some difficult questions about legitimation, as well as tensions and skepticism about how to represent educational phenomena that comprise a relational world of interpreted meanings, feelings, intentions, talk and interaction, the contributors to this Part argue that for inquiry to

count, research designs, processes and accounts invariably demand theoretical sensitivity. Put differently, if every act of seeing/saying is conditioned by invisible strings within cultural discourses, our methodological frames operate as virtual theories of the possible. Thorny epistemological questions inevitably emerge whenever researchers attempt to describe and document educational phenomena, while increasing self-consciousness about our assumptions and procedures opens up a variety of possible ways to proceed (a veritable feast of knowledge idioms and approaches). Recognizing our researcher subjectivity within the social construction of knowledge position requires forms of inquiry that are at once flexible, empathetic and qualitative, and at the same time, culturally aware of the circumscribed configuration of understanding that is impatient with itself for action/change. As Kincheloe (2001) puts it, given the complexities of human relationships, researchers of education must engage multi-methodologies and hence, philosophies that can learn to operate in spaces where certainty and stability appear to have long-since departed for parts unknown. Field researchers are met with a bewildering array of evolving genres of ethnographic, phenomenological, critical and post-informed perspectives influenced by feminist, cultural, gendered and indigenous perspectives. How to proceed in the fact of uncertainty and inevitable critique, as appropriate to any intellectual endeavor (see Britzman 1995; Lather 1993; St. Pierre 2000) demands careful study, courage and as ever, 'further work'.

Wilfred Carr (2007) has located many of the criticisms about the quality of educational research in relation to its failure to provide theoretical rigor as well as practical relevance. His argument is that these epistemic and practical issues are an inevitable manifestation of the flawed assumption that the legitimation of educational research derives from it being understood as a 'species' of modern social science. The epistemological emphasis on criteria found in a special issue of the *International Journal of Research and Method in Education* devoted to issues of quality, foreshadows John Smith's opening chapter on 'Quality in Educational Research' as well as David Scott's on the positionality of critical judgment. Along with Robin Usher's paper on 'A Critique of Neglected Epistemological Assumptions of Educational Research' (Usher 1996) and Gregory Kelly's paper on 'Epistemology and Educational Research,' Smith and Scott engage conceptual/philosophical issues that serve to frame judgments about research quality and hence, its 'legitimacy'. While one can see resonances amongst these contributions concerning the importance of epistemology in discussions about research quality, particularly in conceptualizing the presuppositions governing their own understandings of what can constitute inquiry in education, the real strength of their arguments lies in their willingness to "expose reflectively and revise critically"

these preconceptions unconstrained by discourses of modernity that currently restrict our conversations about education research (see Carr 2007).

Concerning the epistemological basis for all research claims, Usher's (1996) critical exploration of the philosophical underpinnings of research – specifically the epistemological and ontological assumptions underlying different research traditions, which he labels positivist/empiricist, hermeneutic/interpretive, critical theory and postmodern – seems crucial to understanding where critiques of educational research are located. Traditionally, epistemology has been concerned with what distinguishes different kinds of knowledge, generating criteria that allow distinctions between what is dichotomized for all intents and purposes as 'knowledge' and 'non-knowledge.' The argument is that any researcher's claim to know must be justified with due transparency about the basis of how the claim was arrived at. For example, in explicitly accepting objectivity as a claim that legitimates the 'knowledge' and the 'knowing', we are implicitly accepting a positivist/empiricist epistemology with all of the commitments and assumptions these bring (i.e., rationality, determinacy, impersonality, prediction, and perhaps, no need for reflexivity so long as methods have been applied with sufficient rigor?). Although each of these assumptions has been critiqued (see, for example, Phillips and Burbules 2000), it is generally recognized that adherence to such a perspective is still a matter of politics (i.e., power). That is to say, methods are embedded in commitments to particular versions of the world (ontologies) and ways of knowing (epistemologies); no method is self-validating, separable from matters of ontology or epistemology (which themselves are culturally specific, historically located and value laden). However, the dominance of positivist epistemology in social and educational research practice and debate across open, indeterminate social processes has become problematic when considering hermeneutic/interpretive, critical or post-informed theoretical perspectives. Rather, we must understand meaning is complicated within social settings, the argument goes, because it involves culturally-conditioned beliefs and practices which remain perspectival and partial, hence indeterminate and situated (given particular time, space, place, culture, gender, ethnicity, and so on).

Critical theory challenges both positivist and interpretivist traditions as each with particular social interests (e.g., technical and practical), favouring research that has potential to directly change the world in the directions of liberation, justice and democracy. Interest in critical theory entails practicing ideology critique, to unmask the status quo and raise consciousness about the material conditions that sustain taken-for-granted assumptions about what matters or what counts. Sharing with interpretivism an interest in the social construction of knowledge, critical approaches

implicate a preferred set of claims for legitimating the research enterprise, that is, by involving human engagement in the active critique and debate of the research process itself, and moving toward forms of truth that are arrived at through rational agreement in critical discussion. Legitimation then derives from creating conditions for action-based inquiry or praxis through somewhat more idealized communication systems than are found in typical education policy and practical situations based on hierarchies of power relations. Questions of quality become questions of adequacy of process within contexts, particularly where and when change is desired by participants themselves.

Postmodern approaches to inquiry (and their post-structural counterparts) challenge 'modernist' approaches (that rely on unproblematized foundational metanarratives) that presume to represent their subjects/participants transparently and in ignorance of their constitution in discourse. This too is a layered critique, even as it typically requires immediate attention to conceptualizations of identity and agency as unified, rational and stable 'selves' constituted by fixed variables, factors or predictors (as in the string of qualifiers used in categorizing 'research participants', and what is deemed relevant, and of critical valence, for understanding subjectivities). Poststructural approaches complicate assumptions of critical theory in terms of ideal speech situations and make us skeptical about foundational beliefs concerning reality, truth, knowledge and subjectivity that serve as legitimation for education policy and practice as well as educational research. In their challenges to empiricist, rationalist, humanist traditions, feminist or 'perspectival' approaches that advocate cultural and gendered, indigenous, endarkened or ethnically-based approaches to methodology and epistemology, are suspicious of any approach to inquiry that legitimates itself with reference to a metadiscourse based in master narratives (Peters 1999). The point is that post-informed educational inquiry involves learning to look at the world of human interaction through a variety of lenses. This implies more than a casual appropriation of philosophical concepts, including notions of truth and knowledge as multiple and contextual, engaging deeply their implications for different forms of inquiry and different forms of legitimation in structuring our research intelligibility in education (see St. Pierre 2000; Usher 1996).

Kelly (2006) goes beyond Usher's (1996) argument of conceptual neglect to discuss how issues can function as a basis for resolving issues of legitimation and quality more explicitly. As he says, issues about the origins, scope, nature and limitations of knowledge are central for understanding the nature of debates about the legitimacy and value of an educational research project. But he also asks, from the perspective of epistemological diversity, how research communities of practice can go about the process of deciding what counts (as legitimate) and what knowledge is

relevant to the practice of education, as well as to diverse communities of researchers, and their various and many research programmes? Kelly introduces a focus that is pursued by both David Scott and Phil Hodgkinson in this volume concerning the nature of the debate about political processes that produce legitimate knowledge. For example, Scott (2013, Chap. 57) examines these processes theoretically in terms of the complex relationship between evidence and judgment, whilst Hodgkinson's (2013, Chap. 54) focus is more practically oriented toward living within the micro and macro political rule games that confront researchers in their encounters with funding agencies and institutional pressures, including research ethics committees (see also Chap. 61 by McTaggart, this volume).

Kelly's (2006) concern, along with Carr (2007), Hodgkinson and McTaggart, is the influence of dominant research discourses in delegitimizing moral or ethical reasoning (as manifest in the principles, processes and effects of Research Ethics Boards). As these commentators, including Martyn Hammersley suggest, suspicions of ethical/moral argument as legitimate research are implicated in how educational researchers think about the epistemological base for their funded research projects. What these discussions come down to, it seems, are choices that communities of practice can make concerning their values and social practices in ways that are more conscious and critically reflective of the philosophical and empirical bases and biases for their choices. As Kelly (2006) argues, in confronting these issues, educational research faces profound ontological and axiological questions that render the epistemological challenges formidable. The ontological challenge derives from the nature of that which is being researched – the research interest or question – in terms of two basic issues. First, education phenomena are socially constituted as not only theory-dependent but dependent on perspective (i.e., value-embedded assumptions dependent on loosely constructed semantic relationships). Student or teacher identities, for example, are variously defined and influenced by the researched and researcher as theoretical and personal assumptions (cf. on the latter, Giddens's account of the double hermeneutic). Second, the persons and phenomena involved in situations such as 'social learning' are embedded in layers of social context creating complex interrelational relations among people, knowledge, institutions, policies, power, time, space, geography, culture and so forth (i.e. everyday life is infused with theoretical considerations and constructs, even as it is underdetermined by such concerns).

The deeper axiological challenge then goes to moral and ethical representation and use of educational knowledge. Educational issues are often tied to questions of ethics which in turn are issues of larger cultural discourses of educational goals and purposes – such as curriculum

emphasis or program efficiency and effectiveness, or social-political choice, or for that matter, moral choice as educators. Hence, the proliferation of methodological and theoretical choices that respond to the socially constituted, complex, and deeply valued nature of educational research is in need of further discussion concerning their recognition as legitimate questions of and for developing and critiquing research practice. Epistemological diversity necessitates distinctions amongst claims to validity and authority at all levels of educational and social systems, hence the almost universal call for critical discourse, ethics, debate and community participation (Kelly 2006). Moreover, given that education is inextricably tied to questions of morals/ethics (Chap. 61 by McTaggart 2013), evaluation of quality in educational research cannot simply rest on what counts as knowledge without recognition of multiple ways of knowing and, as Carr (2007) avers, without due consideration of whether the idea that knowledge about education must be always be grounded with reference to educational practice.

Layering Beneath the Superficial Political

Issues of legitimation are also intimately tied to questions of the power of academic protocol that imbue academic knowledge/discourse as truth, with a concomitant neutral, objective character that cannot be challenged. It is incumbent then on a *Companion to Research in Education* to open up issues of legitimation from a variety of perspectives that can involve readers in debates that question assumptions that impact every aspect of educational inquiry from choice of question to representation of findings. Legitimation issues implicate history, culture, geography, politics and ideology by rendering more visible, persistent problems of epistemological/ontological systems, values systems and cultural institutions that impact every aspect of educational inquiry. In other words, how one thinks about ideas such as what constitutes truth, reason, knowledge, language and power – as these relate to, say, learning, teaching, curriculum, schooling, and beyond shapes – the very conditions on which education research projects are constructed, represented, and communicated.

In other words, each research perspective is laden with assumptions that reflexive researchers are invited to make more explicit because they cause blindspots and limits in methodology and method. From the perspective of legitimation within circumstances of the social, the more perspectival variety we are able to employ, the more dimensions of phenomena are likely to be revealed. As flight lines work across perspectival boundaries, research conversations shift to creating conditions to open up new directions in talk about issues of responsibility and quality in educational research.

Ideological dimensions of various perspectives as well as regulatory processes and normative tendencies – questions of quality that penetrate the field – provide the basis for conversations and debate, as do the politics or power dynamics that have served to direct any field of inquiry and its critique.

The point of inquiry-focused interaction is not standardized agreement; rather it is increased awareness of the diversity of possibilities that might be explored within particular contexts. Synergies can emerge from broadened social understandings of different perspectives; for example, how concepts from hermeneutics may enrich narrative inquiry or post-informed ideas can add multi-dimensions to ethnographic perspectives on encultured phenomena. Such diversity offers imaginative potential for expanding researcher horizons in places where difference is not merely tolerated but cultivated. It has potential to be more conscious of multiple layers of meaning among participants and researchers, among perceptions as interpreted and represented, and thus allows each to raise new questions about quality. There is nothing simple about conducting and legitimating educational research with humans.

Equally, conceptual and methodological connections go far beyond procedures to stretch boundaries, create connections and educate intermediaries who can build better bridges across territories. If cutting-edge research programmes lie at intersections between such boundaries, says Kincheloe (2001), facilitating and cultivating researcher-researched relationships can work imaginatively to create new tools to push back the boundaries and develop new modes of legitimacy that become key strategies in increasing the quality and value of research and analysis. Yet all of this can come unstuck: without recourse to meta-narratives of applied science, legitimation of knowledge may still only be resolved at the political level (see Chap. 54 by Hodkinson, this volume), that is, at the level of conversation.

In response, as for Peters and Lankshear (1996), we might point to the argument that legitimation discourse must engage issues of quality within the very language games of particular discourses. This follows Wittgenstein as much as it follows Lyotard (1984) and Denzin and Lincoln (1994, 2000, 2005), amongst others, which in educational research circles has tended to highlight the crisis of legitimation in the theatre of qualitative inquiry. Here, applied science as meta-narrative is deconstructed and its functionality disperses within the swirl of languages and rules of multiple methodologies/theoretical perspectives. In short, there simply is no epistemological privilege for any one and only perspective. Rather, as in some of the contributions to the first Part of the *Companion* on the conceptualization of research, truth might be recognized as constructed by rules of consensus, where the rules (procedures, methods) do not carry bedrock justification (or their own legitimation). Thus

the problem of legitimation of knowledge becomes one of a critical reflexive questioning of the ways in which thought is managed against the conflation of theory and ideology.

The question of whether it is possible to ground validity claims in intersubjective debate or not, given the incommensurability of discourse types, is a serious one that remains, and likely will remain, unresolved. On this, we suggest the *Companion* is only able to offer glimpses of some of the work required to represent several viewpoints on this genuine dilemma (witness, for example, Scott's new look at old criteria of quality). However, we can see some of the necessary work taking place quite readily in the exchanges that proffer criteria or argue against specific criteria for educational research. For example, those like Miles and Huberman (1994) who desire to reduce uncertainty through research suggest that educational inquiry be judged in terms of its dependability, confirmability, credibility, and transferability. Such criteria were compared by Guba and Lincoln (1989) to traditional empiricist notions of validity, reliability and generalizability. They are 'plausible' in Hammersley's (1992, 1995) kind of subtle realist position (using plausibility and credibility), and work across Denzin and Lincoln's (1994, 2005) range from realist (i.e., trustworthiness) to non-realist adjudicators of authenticity. Schwandt's (1996) challenge is to the idea of criteria at all, in favour of qualities of ethical coherence in narrative accounts that are generative, provide interpretive insight, and even, hopefully, some rhetorical force as well as elegance of argument. While some recent educational researchers' studies refer to Lather's (re) use of the notion of validity, albeit in radical forms of ironic, paralogically rhizomatic and voluptuous validity (even if this in spite of nagging doubts about re-inscribing old conceptual baggage).

According to Richardson (1990), once the foundations of knowledge are opened to contextualization and indeterminacy, there can be no single language game, overarching discourse or hegemonic paradigm governing educational research (see too the third Part of the *Companion*, on contextualization of educational research). The strong claim here is that for educational research, there can be no transcendental appeal to any kind of essentialism from which general rules of inquiry can be derived. Our constructed perspectives of the world – and they are all constructed – are situated and discourse-dependent. As Denzin (1994a) noted nearly two decades ago, ideas of quality had already been re-theorized in the particular terms of postpositivist (Hammersley 1992), constructivist (Guba and Lincoln 1989), interpretive (Denzin 1991, 1994b), critical (Fay 1987; Kincheloe and McLaren 1994), feminist (Fonow and Cook 1991; Smith 1992) and poststructural (Lather 1993) discourses. And in the absence of (a) a neutral system of language that corresponds to objects in the real world; or (b) an extralinguistic reference point to adjudicate truth claims,

there can be no rule of judgment applicable to all positions (Peters 1995, p. 388). From these epistemological positionings, knowledge/knowing is contingent and bound up in power relations, such that it can only legitimate itself within discursive structures present within specific contexts. So we, in educational research, are learning how to live with less certainty, as social scientists do, but perhaps with more local understanding and knowing (Apple 2000) as we submit our work to these people for critical scrutiny.

Consequently, discussions about antifoundationalism, de-essentialization or de-ontologization (as Denzin and Lincoln 2005, suggest), and the consequent relativization of standards that permit us to see knowledge claims as social and historical constructions, can be viewed as both useful and/or harmful. As Bourdieu (1984, p. 2), says, favouring one over the other depends on our programmes of perception, for to see (*voir*) is a function of our existing concepts of knowledge (*savoir*) or language(s) available. For example, realism in research is not 'the correct' ontology or way of seeing (the world) or the correct form of perception, but rather an historically relative function of changing paradigms, collective ontologies and social structures (see Eisenstein 1949). However, certain forms of representation and corresponding claims to know of particular 'things' or 'ways of knowing' may be officially 'forbidden' in some institutions and contexts. For example, as argued in various contributions to this Part, the attack on paradigm proliferation as undermining official discourse within the United States was launched as a political manoeuvre in favour of realist ontology. The crux is, what counts as 'scientific research in education' has become inherently ideological and contested precisely because it excludes the possibility of other frames of vision.

Standards of quality are also inscribed within political processes that represent power/authority within specific institutions, including the academy. Processes such as tenure and promotion, maintaining rules and procedures, creating distinctions for valuing certain behaviours, the gauging of rewards, and establishing networks of power, each work to arbitrate validation claims. Arguably they also serve ideologically to encode dominant modes of production that variously inscribe and govern the lives of researchers. Indeed, Bronwyn Davies (2013, Chap. 59, this volume) attempts to both illustrate and reframe these issues from the perspective of active engagement in post-informed inquiry.

Changing Flight Plans, Reflexively, as Required . . .

In post-modern terms, designing research projects that consciously engage issues in the social construction of reality facilitate our 'seeing' of how we can legitimately take

ourselves to know and, at the same time recognize the very limits of seeing. In other words, good reflexive work requires that we acknowledge and engage what has and does frame or limit our ability to see and reflect (Lather 1986, 1993), as much as what we may not be able to see within our own particular ideological and discursive positioning. We must also broach how we are using language, becoming more conscious of ourselves within language, which in turn, means folding that language back on itself to see the work it does in constituting the objects and subjects of our inquiries. These issues of legitimation redirect the researchers' focus to questions of the authoring self in the research process, including how a researcher is implicated in the production of findings partly in their reflexive consciousness of their methodological and, hence, epistemological choices in representing 'others', if not his or her self.

Some reflections about reflexivity as a complex, demanding, and apparently fraught practice (see Davies et al. 2004) where we engage methods and at the same time catch ourselves inside those methods, may help researchers avoid getting caught within multiple layers of ambivalence and paralysis around the constitution of the subject. As Davies and her colleagues (2004) say, this is slippery ground that involves attending to the politics of what gets done and what does not at a practical level that permits researchers (and subjects) to see themselves amongst shifting, contradictory, multiple subjectivities, as well as in and beyond the discourses operating to construct and produce us. So, we learn, as researchers, to provide spaces to recognize our own and subject positionings as both constructed by as well as constructing of knowledge. We learn to read our epistemological practices in order to make the constitutive force of the discourse/practice visible and revisable.

This is legitimation work at the level of researcher positioning somewhere along a continuum of reflexivity between assumptions of the ability to generate authentic realist narratives (i.e., 'what you see is what you get') including assumptions about making more visible the discursive nature of the social construction of text accounts of lived experience (i.e., 'the 'truth' as you think you see, or want others, to see it'). In other words, to attempt to deconstruct one's own work is to risk 'buying in' to faith in the process of critical reflection (Davies et al. 2004). As noted above, good reflexive work can help us to surface and reflect on what frames our seeing (Lather 1991) as a process of engaging readers in thinking about (i.e., what we can and cannot see in) our conceptual/ideological and methodological positioning, its merits and its limitations. Thus, legitimation itself depends on our ability as researchers to explore publically issues of theory and methodology in contributing to naming and addressing some of the epistemological problems we have inherited. It may also involve creating new research processes, as those which are more responsive and responsible,

providing openings as generative and more politically aware, if not critically interrogating unexamined assumptions of our presence in the research accounts we create. Moreover, it can even involve knowing ourselves as coincidental in the texts we write and regarding them as multiple texts to be read in multiple ways – as openings for other ways of knowing.

It is interesting that Denzin (1997), who is critical of narrative slippages into realism, nonetheless organizes a framework for inquiry based on the notion of a self-reflexive researcher who can know from experience. Such an epistemological position demands a kind of reflexivity such that a self both is and is not a fiction, both is unified (transcendent) and fragmented (in constant reconstitution), both can be spoken of in realist ways (as if they exist out there) and cannot (because they have been produced), and both authentic and with no guarantee of authenticity. So, we can accept the subject (as researcher) only by critically examining what constitutes a subjectivity as something that can ‘be’ other than she or he thinks it is (or intends itself to be) particularly when it is constituted as some unified, rational ‘being’ (or ‘becoming’). After Denzin then, it is possible to write reflexively of our researcher and subjective selves without invoking simple realist accounts as acts of legitimation, because we do not simply have subjective accounts of experience but reflexive mappings from multiple discourses that can occur within given social spaces. Intersubjectively the writer/researcher and the reader move through descriptions, interpretations and voices, attempting to (re)create social situations where identities and local cultures are interactively negotiated and given meaning.

Such legitimation work may appear to involve researchers working in schizophrenic spaces of at once generating what appear to be modernist accounts telling perhaps critical realist tales, whilst also avoiding realist claims and reproductions that harden the categories, by for example, actively searching their own and others’ embodied selves for the discourses that made them do it in the first place. They – even, we – ‘do it’ as a means of searching for ways of at least momentarily breaking out of those determinate structures and practices through which researchers are constituted and made real discursively (Denzin 1997). We can begin with our stories, say Davies et al. (2004), but we must seek legitimation in our ability as researchers to explore our resources with different inquiry problematics, in aid of finding new frames and new forms of thought and practice. These, it is hoped, can reveal how we have ‘learned’ to enter consciously and unconsciously into pre-given structures (categories) of culture/society and ‘learned’ to take up as our own the terms of our subjectification in the various fields of educational research.

Given that social forms of thought, beyond positivism, must engage issues of social construction, how we can

legitimately work as educational researchers within a continuum of reflexive positionings requires knowing something about the ontological and epistemological underpinnings of the possibilities of various positionings. It means finding and developing ourselves as researchers, clarifying our assumptions about writing narratives, and recognizing our assumptions about the limits of our ability to represent ourselves, let alone others. If we accept that issues of legitimation depends upon our ability as researchers to explore issues of theory and method, then at the same time we have problems of representation that we have inherited and must engage too (see final Part V of this *Companion*). And if we can view each piece of research as contributing to the framing of new, imaginative inquiry processes, as a kind of generative political process that comes with the territory, perhaps we can begin to assume some responsibility for critical interrogation of those unexamined assumptions of our presence within the accounts we create.

Knowing ourselves as responsible for the texts we write, our attempts at meaning making through which we learn our process of subjectification requires seeing the writing process itself as a way of coming to know. This is the terrain of learning how to write mindful of the limits of discourses, to make visible the discourses that catch us up, to write stories not as authentic truth but as recognizable and imaginable by others, not as essentialized fictions about unified versions of researcher and researched selves but as a way of exposing discursive imperatives at play. It is learning to write differently not about why we think things happened in or as education but getting at details of how they came to be, through self-conscious, reflexive acts. As we explore in the next Part V of the *Companion* on representation, it seems possible, perhaps through ethnopoetic or autoethnographic work, to recreate and represent social spaces where identities and cultures are interactively negotiated and given meaning.

With researchers working then in textual spaces that can reproduce multiple versions of the real, some, but not all, may feel impelled to show how each version impinges and shapes the education phenomenon being represented. The blurring of rules of legitimation, and the absence of universal criteria, might also make possible the assessing of research in terms of what it does – the value added. The question here becomes one of how any such account is made adequate in actions that seek to manage the inevitable integration and interpretation of power/knowledge within discourses of education that give it direction. Reflection on conditions in which such actions are accepted as legitimate should not keep us from making moral judgments in where to draw bottom lines, but should challenge their self-evidentness and the methods by which they were socially constructed. Criticism as socially engaged can revitalize our ideals about what counts (or what really matters) in educational research by rendering their production transparent and open to

challenge or refinement, creating spaces for one to trace the ontology into which we were previously locked. The point, it seems, is to explore and critique rhetorics of positionings as a way of assessing education research practices that flow from them, to reflexively sort out the modes of discourse/practice within contested fields and intellectual/embodied position which frame our assumptions and discourses.

Legitimation practices under these conditions of reflexive judgment acknowledge contradictions between the reflection of reality in language as well as the constitution of reality by language. In fact, recognition of research methods (practices) that generate the texts (i.e., language) as acts of social and moral creation requires some reflexivity to sort out the modes of discourse/practice within (or beyond) intellectual traditions (as argumentative fields) which frame the discourse (Brown 1995). We engage such reflexive debates within our relevant communities and contexts that can reveal our fidelities to certain conditions as reflexively considered and critiqued. We invite deconstruction of our judgments by the very moral, relativizing (i.e., interpretive) methods that have directed us to our education research projects. Edwards, Ashmore and Potter (1995, pp. 30–31) summarize this process of reflexive judgment in terms of the provisionality of our research accounts within ironic conditions of contestability within communities of practice.

Going Beyond, Thoughtfully, Because We Must . . .

McKenzie (2004) summarizes the dilemma of the pull of modern meta-narratives, such as the valuing of culture and ecological diversity on the one hand, and on the other, recognizing the narrative as relative in terms of ‘willful contradictions.’ Her focus on implications for pedagogy can be paralleled by implications for inquiry. Following Martin (2001), one could ask of educational researchers, how to proceed in thoughtful response to modernist imperatives such as oppression or ecological destruction in recognition that one cannot make unbiased judgments? According to Martin (2001) and Lather (1991), being political means realizing one’s perspectives are biased yet nevertheless acting in the world, taking a stand. If the biased judgments are understood as being rooted in localized knowledge instead of existing *a priori* – with these ‘fictions’ recognized as being under constant interrogation, continually formed and refashioned depending on shifting circumstances and priorities, and existing only as ‘little narratives’ about a world that remain admittedly partial – then the taking up and relinquishing of these and other narrative research accounts can be seen as research guided by a stance of willful contradiction.

Legitimation practice with willful contradiction as a horizon encourages us to put our own views at risk. We become research practitioners embedded within discursive structures and yet still capable of agency, researchers whose subjectivity is fluid, constituted in changing relationships to the relative power of various discourses over contexts and time, researchers whose agency lies precisely in its ongoing constitution, yet at once able to recognize that constitution and to resist, subvert or change the discourses themselves (Davies 2000, p. 67). Researching with the possibility of pursuing and enacting willful contradiction involves a constant reworking to identify the narratives through which one is constituted (Davies 2000, 2003), as an imperfect process of ‘seeing’ what frames one’s seeing. This imperfect process of legitimation can be seen to operate in the constant resignification of various discourses—viewed as ‘theoretic fictions’ and thus useful for particular applications, but perhaps undesirable for others. We learn to position ourselves as researchers, not as ‘lens masters’ but creators of conditions (of an intellectual and intelligible space and place) where participants can speak on their own behalf – but for themselves – in greater recognition that their voice gives rise to their own theoretic fictions. How researchers do this without ‘romanticizing the subject’ and experience-based knowledge is the issue, says Lather (1991). The best solution that she or Ellsworth (1989) can come up with is to reposition themselves elsewhere, from that of the ‘other’ who is the problem for which ‘we’ are the solution. Such solutions also recognize that the need to give voice comes with the need to critique it as partial, contradictory and predicated on the absence and marginalization of other voices. Ellsworth’s (1989) notion of critique, however, was not about dialogue which attempts to unify but through affinity groups that could work across difference to question, educate and support each other. As Martin (2001) says, the aim is to disentangle how it is we have come to think and see what we see through educational research – making it possible to see differently. In other words, we must question our identity locations as researchers and participants as well as our understandings constructed within the cultural/social discourses of everyday experience. This includes those cultural imaginaries, sacred stories, or cultural narratives found in community, family, media as the repositories for social constructions reflected in our educational institutions, texts, curriculum, and pedagogical spaces, and lives as learners, teachers or/and educators. Such questioning of the truths/fictions on which our lives are built can be seen as research responsibilities within inquiry spaces that nurture rather than foreclose debate and ignore difference.

Practices of such open discourse are legitimation practices that recognize ambivalence and difference, but not as obstacles. Rather they are creative spaces of meaning making within the aphorias between tendencies in which we

have the courage to locate ourselves for the moment and the wisdom to work to develop our ideas as a movement toward more promising practices (Brown 1995). However, apparently the idea of open discourse is also problematic given that language provides the building blocks of our worldview, simultaneously constructing and limiting our vision. That is, language reflects and constructs power, and echoing Michael Peters in his introduction to the previous Part III of the *Companion*, we note Eurocentric epistemology is already imbued with the linearity implicit in English language making.

At issue here is the question of Eurocentric knowledge (including the conventions of its making) and the practices of academic discourse that may serve to marginalize everything else and directly contribute to the politics of what counts (i.e., legitimation practices). Legitimatory power comes not only in naming and categorizing but in dismissing other knowledges derived from other ways of knowing (e.g., Aboriginal) as inferior. As any environmentalist worth her salt will tell you, when nature or animals are construed as resources, such a conceptualization in language strongly legitimates Eurocentric concepts of management and (agricultural) practice.

The assumption of open discourse then must account for the fact that legitimation is a relative concept that relays aspects of political control, as Hodkinson (2013, Chap. 54, this volume) suggests. The question of whether legitimation – as an issue – could be used to open up controlling management structures of what constitutes education research remains. Changing the discourses of institutions such as the academy or government funding agencies or journal publishing standards, as well as persistent processes of epistemological systems, value systems within cultural institutions and other historically-derived and deeply entrenched ways of being-in-place, seems to be the issue that contemporary discussions about legitimation must address.

We have choices, within and across educational research communities. How badly do we want or need forms of legitimation (and representation) that can recount lived experience in search of local knowledge rather than essentialized truths? Must our truths about education, for example, assume identities as singular and static, boundaries as external, time as separated from space, language as separated from embodiment (geography) and culture (context)? Or can, indeed must, educational researchers recognize how we are bound by our own epistemological frames/understandings that make it difficult to envision let alone portray adequately other ways of knowing?

In challenging the assumption that Eurocentric discourse can simply make the world as we wish it to be, post-informed, post-critical discourses argue for situated learning in situated social engagements toward more active researcher-participant partnerships in the (re)construction

of knowledge. Going beyond the idea of ontological pluralism, as in acknowledging the possibility of multiple ways of knowing, we are now in the terrain of power shifting. Put differently, by engaging ‘noisy’ dialogues (Howitt and Suchet-Pearson 2003) in search of meanings for local situations, we invite category and boundary/binary work around concepts: why/when are educational constructs penetrable, fluid, blurry and complex, on shifting terrain, and not? We may then engage in the discursive spaces of ontological pluralism more genuinely, in ways that consider not only how knowledges form, but how they interact and why this matters.

We can also learn to work in places where everyone’s ground is destabilized, challenged and surprised, if we focus on questions of positioning and contextualizing in terms of specific material, and conceptual and discursive spaces. Recognizing them as permeated by knowledges crossed and conflicted by the dominant social discourses which must be actively debated, how we conceptualize and characterize educational research is also open to question, i.e. not settled. In so doing however, warn Howitt and Suchet-Pearson (2003), we must also recognize that engagement with the local/specific brings its own cultural assumptions – empowering some based on the same beliefs but risking simply inverting power, closing dialogue and silencing others, perhaps even reinforcing reversed, colonized and colonizing relationships (i.e., discrimination) if assumptions are not challenged.

If we agree that we cannot simply invert the old categories of legitimacy and legitimation, the only recourse seems to be to further decolonize our minds, for others too may have internalized a set of Western dualisms. With no position outside particular social constructions of knowledge, we can maintain the constant challenge to any universalizing of quality and standards by grounding values in experience – asking what we do in situated places (Howitt and Suchet-Pearson 2003). This does not mean having no guiding principles/values to live by in a community of researchers. But it does mean having research values fully rooted in perceptions and attitudes of everyday life that actively seek to continuously work on subjectification processes in intersubjective ways, in the most concrete of terms, i.e. focusing on what educational researchers actually do, in practice.

Given its history, commitments and complicities, ‘Western, Anglo’ educational research is not well placed to (re) consider seriously what is involved in moving beyond the privileged positions of Eurocentric ideologies/discourses/ontologies. This is a difficult task that will trouble our operating frames – disrupting our assumptions about what counts as legitimate knowledge, as research, and as evidence. But the idea of beginning with our own processes and positionings is appealing – to (re)construct our inquiries

as participatory, where the tasks involve (re)examining questions of value and valuing as well as methodological (and pedagogical) ones that are imbued with challenges of power, language, and history. Such questions reach into our epistemological/ontological assumptions, requiring reflexivity about which research orientations we choose and about what counts. And in so doing, they may also continue to open up new discursive spaces, new material, conceptual and social activities in the process.

The chapters and commentaries in this Part of the *Companion* provide new opportunities to enter into discussion about the persistent issues of legitimation and quality. Every educational researcher knows, in their bones, the need to immerse oneself in readings and discussions of ‘position and motion’ that also anticipate critique as inevitable. Each of the contributors in their own way, has ‘worked the ruins’ of these issues. Each is familiar with a variety of perspectives and each continues to re-engage the debates, because we must re-engage the debate. Improving the quality of educational research depends on this re-engagement in the intelligibility and legitimacy of our work. Understanding why we have come to occupy certain territories and positions about legitimation is worthwhile. We hope that by creating another access point to these debates our *Companion* helps engage these and other critical reflections about why we (think) do what we do in educational research.

Note on Contributor

Paul Hart is Professor of Science and Environmental Education at the University of Regina and has been Visiting Professor at universities in Zurich, Bath, Durham and Monash. He has published widely in the field of environmental education, is Senior Editor of the *Journal of Environmental Education*, and Consulting Editor for several other journals. He has received many research awards and has served on the Grants Adjudication Committee for the Social Sciences and Humanities Research Council of Canada. Paul’s current research interests are in the area of sociocultural learning and the construction of environmental identity.

References

- Apple M (2000) *Official knowledge: democratic education in a conservative age*, 2nd edn. Routledge, London
- Bourdieu P (1984) *Distinction: a social critique of the judgement of taste* (trans: Nice R). Harvard University Press, Cambridge, MA
- Britzman D (1995) Is there a queer pedagogy? Or, stop reading straight. *Educ Theory* 45(2):151–165
- Brown R (ed) (1995) *Postmodern representations: truth, power, and mimesis in the human sciences and public culture*. University of Illinois Press, Urbana
- Carr W (2007) Educational research as a practical science. *Int J Res Method Educ* 30(3):271–286
- Davies B (2000) *A body of writing, 1990–1999*. Altamira, New York
- Davies B (2003) *Shards of glass: children reading and writing beyond gendered identities*. Allen & Unwin, Sydney
- Davies B (2013) Legitimation in post-critical, post-realist times, or whether legitimation? In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 443–450
- Davies B, Browne J, Gannon S, Honan E, Laws C, Mueller-Rockstroh B, Petersen E (2004) The ambivalent practices of reflexivity. *Qual Inquiry* 10(3):360–389
- Denzin N (1991) Representing lived experiences in ethnographic texts. *Stud Sym Interact* 12(2):59–70
- Denzin N (1994a) Evaluating qualitative research in the poststructural moment: the lessons James Joyce teaches us. *Int J Qual Stud Educ* 7(4):295–308
- Denzin N (1994b) The art and politics of interpretation. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*. Sage, Newbury Park, pp 500–515
- Denzin N (1997) *Interpretive ethnography: ethnographic practices for the 21st century*. Sage, Thousand Oaks
- Denzin N, Lincoln Y (eds) (1994) *Handbook of qualitative research*. Sage, Newbury Park
- Denzin N, Lincoln Y (eds) (2000) *Handbook of qualitative research*, 2nd edn. Sage, Thousand Oaks
- Denzin N, Lincoln Y (eds) (2005) *Sage handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks
- Edwards D, Ashmore M, Potter J (1995) Death and furniture: the rhetoric, politics and theology of bottom line arguments against relativism. *Hist Hum Sci* 8(2):25–49
- Eisenstein S [1929] (1949) The cinematographic principle and the ideogram (trans: Leyda J). In: *Film forum: essays in film theory*. Harcourt, Brace & World, New York, pp 29, 32–34, 65
- Ellsworth E (1989) Why doesn’t this feel empowering? Working through the repressive myths of critical pedagogy. *Harvard Educ Rev* 59(3):297–325
- Fay B (1987) *Critical social science*. Cornell University Press, Ithaca
- Feuer M, Towne L, Shavelson R (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Fonow M, Cook J (1991) Back to the future: a look at the second wave of feminist epistemology and methodology. In: Fonow M, Cook J (eds) *Beyond methodology: feminist scholarship as lived research*. Indiana University Press, Bloomington, pp 1–15
- Guba E, Lincoln Y (1989) *Fourth generation evaluation*. Sage, London
- Hammersley M (1992) *What’s wrong with ethnography?* Routledge, London
- Hammersley M (1995) *The politics of social research*. Sage, London
- Hargreaves D (1996) *Teaching as a research-based profession: possibilities and prospects*. teacher training agency lecture. Teacher Training Agency, London
- Hillage J, Pearson R, Anderson A, Tamkin P (1998) *Excellence in research on schools*. Department for Education and Employment, London
- Hodkinson P (2013) The politics of legitimating research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 407–415
- Howitt R, Suchet-Pearson S (2003) Ontological pluralism in contested cultural landscapes. In: Anderson K, Domosh M, Pile S, Thrift N (eds) *Handbook of cultural geography*. Sage, London, pp 557–569
- Kelly G (2006) Epistemology and educational research. In: Green J, Camilli G, Elmore P (eds) *Handbook of complementary methods in education research*. Lawrence Erlbaum, Mahwah, pp 33–55
- Kincheloe J, McLaren P (1994) You can’t get to Emerald City from here: rethinking critical theory and qualitative research. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*. Sage, Newbury Park, pp 138–157
- Kincheloe J (2001) Describing the bricolage: conceptualizing a new rigor in qualitative research. *Qual Inquiry* 7(6):679–692

- Lagemann E (2000) *An elusive science: the troubling history of educational research*. University of Chicago Press, Chicago
- Lather P (1986) Issues of validity in openly ideological research: between a rock and a soft place. *Interchange* 17(4):63–84
- Lather P (1991) *Getting smart: feminist research and pedagogy with/in the postmodern*. Routledge, London
- Lather P (1993) Fertile obsession: validity after poststructuralism. *Sociol Quart* 34(4):673–693
- Liotard JF (1984) *The postmodern condition: a report on knowledge* (trans: Bennington G, Massumi B). Manchester University Press, Manchester
- Martin R (2001) *Listening up: reinventing ourselves as teachers and students*. Boyton/Cook, Portsmouth
- McKenzie M (2004) The “willful contradiction” of poststructural socio-ecological education. *Can J Environ Educ* 9:177–190
- McTaggart R (2013) Evolving ethics of educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 457–469
- Miles M, Huberman A (1994) *Qualitative data analysis: an expanded sourcebook*, 2nd edn. Sage, London
- Peters M (1995) Education and the postmodern condition: revisiting Jean-François Lyotard. *J Philos Educ* 29(3):387–400
- Peters M (1999) (Posts-) modernism and structuralism: affinities and theoretical innovations. *Sociological Research Online*, 4(3). <http://www.socresonline.org.uk/4/3/peters.html>
- Peters M, Lankshear C (1996) Postmodern counternarratives. In: Giroux H, Lankshear C, McLaren P, Peters M (eds) *Counternarratives: cultural studies and critical pedagogies in post-modern spaces*. Routledge, New York, pp 1–40
- Phillips D, Burbules N (2000) *Postpositivism and educational research*. Rowman & Littlefield, Lanham
- Richardson L (1990) *Writing strategies: reaching diverse audiences*. Sage, London
- St. Pierre E (2000) The call for intelligibility in postmodern educational research. *Educ Res* 29(5):25–28
- Schön D (1983) *The reflective practitioner*. Basic Books, New York
- Schwandt T (1996) Farewell to criteriology. *Qual Inq* 2(1):58–72
- Scott D (2013) Criterial judgements in education: knowledge and research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 425–431
- Seale C (2004) Quality in qualitative research. In: Seale C, Gobo G, Gubrium J, Silverman D (eds) *Qualitative research practice*. Sage, Thousand Oaks, pp 409–419
- Shavelson R, Towne L (eds) (2002) *Scientific research in education*. National Academy Press, Washington, DC
- Smith D (1992) Sociology from women’s perspective: a reaffirmation. *Sociol Theory* 10(1):88–97
- Thomas G, Gorard S (2007) Editorial: quality in education research. *Int J Res Method Educ* 30(3):239–242
- Tooley J, Darby D (1998) *Educational research – a critique: a survey of published educational research*. Office for Standards in Education, London
- Usher R (1996) A critique of the neglected epistemological assumptions of educational research. In: Scott D, Usher R (eds) *Understanding educational research*. Routledge, London, pp 9–32

John K. Smith

Abstract

At a time when a methodical criterion is no longer a possibility for judging the quality of social and educational research, considerable concern has arisen over how to sort out good research from the not-so-good. This chapter discusses the philosophical disputes that now circumscribe this issue, with a particular focus on neorealist and relativist approaches to the assessment of research quality. For the former, some prospect still exists for non-time and -place contingent criteria; for the latter, criteria only can be contingent on time and place.

Keywords

Criteria • Relativism • Neorealism • Quality • Philosophy

Introduction

Any discussion of what counts as quality in social and educational research can be framed by one straightforward question: What can we call upon to sort out the differences that inevitably arise amongst researchers over claims to knowledge? This philosophical question stands behind all manner of more tangible questions that face researchers on an almost daily basis: How do I decide from among a number of studies which one has given the better interpretation/description of what is going on in a classroom? Is this research of sufficient quality that, in my role as reviewer for a journal, I can recommend it for publication? Is this dissertation of sufficient quality that I can sign-off on it? And, Does this student research seminar paper deserve and an A or something less?

Broadly speaking, there are two interrelated levels at which this what-counts-as-quality issue can be elaborated. At one level there are the discussions of various criteria, many if not most of which have traditionally focused on particular procedures or methods for doing research which should/must be applied by researchers. These methods are central to

research quality judgments and are thought of as having universal application; they are standards that stand above or beyond the contingencies of time and place. Virtually every how-to-do-it social and educational research textbook addresses the issue of research quality in terms of methods.

At a second level, even though there is an interest in the specifics of quality judgments, by far the dominant concern is with the conceptual or philosophical issues that frame the limits and possibilities for our actual judgments about research quality. If the interest in the former instance is most often on method, for the latter it is on methodologies or the philosophical and conceptual frameworks researchers bring to bear, even if only implicitly, to justify their judgments about the quality research.

Over the last 40 years changes in the philosophy of science and the social sciences have contributed not only to a loss of confidence in how we think about and actually make judgments about research quality, but also about how we make judgments in many areas of our intellectual and cultural life in general. This crisis of confidence has emerged in the United States over judges legislating from the bench as opposed to strictly interpreting the law based on the original intent of the framers of the Constitution and fussing among journalists over what it means to be an “objective” reporter. As Bernstein (1983) puts it, there has been a “movement from confidence to skepticism about foundations, methods,

J.K. Smith (✉)

College of Education, University of Northern Iowa, Cedar Falls, IA, USA
e-mail: john.smith@uni.edu

and rational criteria of evaluation [that] has not been limited to philosophy . . . The confusion and uncertainty in philosophy exhibits and reflects a phenomenon that is characteristic of our intellectual and cultural life. In the entire range of the human and social sciences, we have witnessed the playing out of bold attempts to secure foundations and the elaborations of new methods that promise genuine knowledge, followed by a questioning that reveals cracks and crevices in what had been taken to be solid and secure” (p. 3). In this chapter I focus on these recent philosophical disputes and what they mean for the limits and possibilities of our judgments about quality in educational research.

An Historical Sketch

A very brief review of how and why judgments of quality in social and educational research, especially among Anglo-American researchers, became method-dominated is necessary to an understanding of today’s confusion, if not anxiety, over the issue of research quality. In the early decades of the last century, positivistic forms of empiricism and realism settled in to become the widely accepted and only occasionally challenged philosophical underpinnings of social and educational research. The central idea drawn from positivistic forms of empiricism and realism was that quality research was scientific research and scientific research was research that followed a certain set of methods which were referred to, not surprisingly so, as “scientific.” This perspective became so widely and deeply accepted that to this day many, if not a majority of, educational researchers think of it as “common sense” or “what everyone knows.”

What following the scientific method was supposed to do was allow educational research, as was presumably the case for the physical research from which the approach was borrowed, a contact with reality in such a way that accurate depiction of that reality was possible. Quality research became defined as research that presumably depicted reality as it really is, whereas inferior research was research that somehow distorted reality. The central terms adopted to announce this distinction, which achieved virtually iconic status among both professional researchers and people in general, were “objective” and “subjective” – along with corollary terms such as “valid-invalid,” “accurate-inaccurate,” and “rigorous-not rigorous.” And, most importantly, at the center of the “quality research-objective-accurate depiction of reality” and “inferior research-tainted by subjectivity-distorted depiction of reality” distinction were the proper methods, properly applied. As Bauman (1978) put it, the originators of social science “regarded true knowledge as, above all (if not solely), the question of method and its systematic application,” (pp. 15–16), which meant judgments of

research quality became, and remain, at least in the first instance, judgments about methods.

In the first few decades of the twentieth century an idea that had been developing since at least the late 1700s became generally accepted: it is desirable and possible to have a “science” of the social, based on method, modeled on the impressive developed/developing method-driven science of the physical. There is no question that the social sciences were, if not born, certainly nurtured in the shadow of the accomplishments of the natural sciences (see Giddens 1976). This is a nurturing that continues until today, readily apparent amongst many educational researchers, where comments on the order of “if only we were like medical researchers” are common (for example, see Shavelson and Towne 2002; Slavin 2002). Then, as is the case now, the idea was/is that if social researchers adopt the methods and methodology of physical researchers they likewise could achieve a practical mastery over their subject matter (the ability to predict and control) and be able to explain how they are doing so (intellectual mastery).

By the 1930s, after a fascinating intellectual dispute between social inquirers who argued that social inquiry should directly contribute to assisting the disadvantaged and those who thought social inquiry should indirectly solve social problems by offering objective research results to policy makers, the latter carried the day (Furner 1975; Ross 1991; Smith 1994). The idea that social and educational research could be neutral and objective research and that neutral and objective research was research that embraced a special method or a set of procedures became firmly established. The scientific method had won the day and the positivistic language of objectivity, law-like generalizations, prediction and control, and so on became the rarely contested currency for discussions about social and educational inquiry and, of course, the language for discussions about how to judge research quality. Years after this dispute was resolved, the author of one of the more widely read introductory social research textbooks, Kerlinger (1979), captured the full force of the embrace of method when he said, “The procedures of science are objective – not the scientists. . . . Scientists, like all men and women are opinionated, dogmatic, ideological . . . That is the very reason for insisting on procedural objectivity; to get the whole business outside of ourselves” (p. 264).

For about the next 50 years, there were very few dissenters from the orthodoxy that positivistic forms of empiricism and realism had become among social inquirers. Critics like Andreski (1972), Lynd (1939), Mills (1959), and Gouldner (1970) had a hearing among social inquirers, but they did not disrupt the dominant influence of what they, among others, derogatorily called “abstracted empiricism” or “scientism” on the practice and general understanding of social research. The overwhelming majority of social and

educational researchers were convinced that they were engaged in a science of society that was much like the science of the natural world. Research that did not embrace the “scientific method” was thought of as lacking sufficient rigor and, at most, it could only be of value as a source of hypothesis for the more rigorous methods-driven research (from Abel in 1948 to Shavelson and Towne in 2002). For researchers it was common sense to think “that their discipline was now on the secure path of becoming a natural science that differed in degree and not in kind from the rest of the natural sciences. Progress in the social sciences they argued, required adopting and following those methods, procedures, and criteria for testing hypotheses and theories that had proven so successful in the natural sciences. They therefore scorned “interpretive sociology” with its appeal to *Verstehen* (understanding) [and] the prevailing dogma [was] that while a concept like *Verstehen* might have some value in helping to clarify how social scientists make good guesses and invent hypotheses and therefore was relevant to the context of discovery, it was irrelevant to questions about the validation and testing of social scientific hypotheses and theories which are formulated to explain and predict social phenomena” (Bernstein 1983, pp. 26–27).

Changes in the Philosophy of (Social?) Science

One of the reasons why the early dissenters to “scientific” or methodically driven social inquiry had little impact was that they were ahead, not necessarily intellectually but certainly temporally, of major changes in philosophy of (social) science that undermined the claims that a positivistic form of empiricism was the foundational theory of knowledge. Beginning with Locke (see Yolton 1977) if not somewhat before his time, empiricism was placed on the path to becoming the dominate theory of knowledge in Western philosophy. At the core of empiricism as a foundational theory of knowledge – meaning by foundational a theory that would support claims to certitude because our sense experiences would enable us to depict reality as it really is – was the idea that a line of distinction could be drawn between the observer/researcher and what is observed/researched (often referred as the spectator theory of knowledge, or in philosophical terms, as subject-object dualism). Once this distinct separation was assumed, the philosophical task was to justify a reconnection of subject and object in a way that allowed for former to accurately depict the latter.

For over 300 years of empiricist philosophizing numerous arguments and variations on these arguments were made about how to reconnect what had been separated. These attempts ranged from the mind as a blank slate to be written

upon by sense experience to that of developing a purely descriptive language where the meanings of words were taken from the objects to which they referred. The latter attempt, advocated by the logical positivists of the Vienna Circle, was the last great attempt to connect subject and object in a way that would establish an uncontested foundation for empiricism upon which to sort out true from false claims to knowledge. Leaving aside a great deal of philosophizing complexity, at the heart of logical positivism was the idea that a language could be developed in which words refer directly to objects or, put differently, the meaning of a word is the object (a picture theory of language). And, if such a language was possible then the correspondence theory of truth was the obvious result as the way to define truth—when one’s words match the object, one has spoken the truth.

As had happened repeatedly in the past, every time an argument had been advanced that offered a secure foundation and method for knowledge/truth, questions arose that pointed to cracks in the foundation. In the case of logical positivism, the desire to develop a purely descriptive language that would hook onto reality, one cleansed of evaluative terms, was soon realized to be an impossibility—if not abstractly so, certainly practically so. Our vocabulary is loaded with terms that are hopelessly fuzzy when it comes to the question of whether they are descriptive or evaluative. As Putnam (1981) notes in his discussion of a word like *inconsiderate*: “The judgment that someone is *inconsiderate* may indeed be used to blame; but it may be used to simply to describe, and it may also be used to explain or predict” (p. 139). There are clear implications of Wittgenstein’s arguments here that the meaning of a word does not come from the object to which it supposedly refers, but rather the meaning of a word is how it is used – with the obvious conclusion that the same word can mean different things in different contexts and at different times. The impossibility of developing a purely descriptive language, along with other problems, led to the rapid decline of logical positivism and the end of attempts by empiricists to develop a foundational theory of knowledge – one that would offer the possibility of achieving certitude.

By the 1980s the focus of the philosophy of science and especially that in the social sciences was well recognized as having dramatically changed. The hope for a foundational theory of knowledge was no longer thought viable – so much so that Hazelrigg (1995) could conclude, with no fear of contradiction, “that we can no longer speak the name of absolutism [certitude] without embarrassment” (p. ix). Arguably, the most important idea in the retreat from foundationalism was that all observation is theory-laden or that there is no possibility of theory-free knowledge. Although this idea well predates the work of Hanson (1958) and Kuhn (1962), among others, a good case can be

made that they, especially the latter made it clear that as knowing subjects we are intimately entangled with any claim we make to knowledge or to what counts as knowledge. And, by obvious extension, this means we are intimately a part of any understanding we have of what counts as quality in research.

Hanson (1958) began with the now widely accepted and seemingly obvious point that “the theory, hypothesis, framework, or background knowledge held by an investigator can strongly influence what is observed” (p. 7). Following this line of thought, Kuhn’s (1962) concerns about paradigm shifts, incommensurable paradigms, that all knowledge is framework dependent, and so on, although or because they were widely contested and critiqued, became central to our thinking about how to justify knowledge claims and, accordingly, how to judge quality research. Within years, the work of very many philosophers, arguing from varied perspectives, made one central point very clear; because there can be no theory-free observation/knowledge, there can be no foundation for knowledge claims. To cite just a few examples, there was Bernstein’s (1983) discussion of no “Archimedean point,” Goodman’s (1978) ways of world making, Taylor’s (1971) undermining of the hope for “brute data,” Rorty’s (1979) dismissal of the mind as the “mirror of nature,” and Gadamer’s arguments about (1995) “effective history.” Putnam (1981) focuses all of these arguments when he says that “There is no God’s Eye point of view that we can know or usefully imagine; there are only the various points of view of actual persons reflecting various interests and purposes that their descriptions and theories subserve” (p. 50).

Along with the work of the above philosophers, there were others (such as Hesse 1980; Giddens 1976; MacKenzie 1981; Smith 1985) who contested the claim in introductory textbooks of social and educational research that method itself is neutral and is the guarantor of procedural objectivity. One example will give a sense of the arguments made by the critics of method as neutral/objective. MacKenzie argued that even statistics, that seemingly most neutral and objective tool in the social researchers bag, is itself a product of social and cultural influences. He makes the case, and convincing so for many people, that the statistics that were developed in Great Britain from around 1865 to 1930, and which are still honored by social researchers, were not discovered, but rather socially constructed. Put differently, MacKenzie says it is insufficient to hold that the concepts behind statistics and the mathematical working out of these concepts were somehow “out there” awaiting discovery; to the contrary, the particular concepts and mathematical techniques were constructed within the context of certain value orientations to accomplish particular goals. MacKenzie notes that to understand the statistics commonly

used today, one must understand how they were constructed in light of the eugenicist dispositions of people such as Galton, Pearson, and Fisher. And, we may further conclude from his discussion that if different social interests had prevailed at the time, we would have seen the construction of different statistical techniques (see pp. 153–182 for MacKenzie’s (1981) discussion of the dispute between Pearson and Yule on different interests-different statistics).

The image of method to be taken from MacKenzie (1981) and other critics is that methods are not discovered, they are constructed in line with particular goals, values, and political/ideological commitments. This does not mean that there is necessarily a direct, conscious connection on the order of “Because I am a eugenicist, from a range of statistical techniques I choose this one because it allows me to advance my eugenicist goals.” To the contrary, our interests and purposes are part of who we are and how we see the world. We all, researchers included, have a place in the world – an effective history (Gadamer 1995) – that deeply influences how we see the goals of research, how research should be undertaken, and, of course, how we should judge research quality.

What Lynd (1939), Gouldner (1970), and others had questioned about a methodically driven social inquiry that would result in accurate representation or objective accounts and thereby provide the criteria for sorting out knowledge claims, now has solid philosophical support. The point is not whether one agrees with those who have criticized method as neutral and objective; rather the issue is that the idea of method as a marker of quality research has been very seriously called into question. How we judge quality in research is now open to serious debate – certainly among philosophers if less so among research practitioners.

To summarize: The philosophical landscape is now highly contested. Empirical realism in its positivistic formulations has reached its demise. Almost no one, if there is anyone at all, defends the possibility that we can have a direct access to reality in a way that will allow us to claim reality can be accurately or objectivity depicted and described. In fact, the most commonly used term to refer to this those who held this position in the past is that they were “naïve realists.” And, related to this is the further realization that there can be no uncontested claim of a foundation for our knowledge. Epistemological foundationalism is now a nonstarter, having been replaced by quasi-foundationalism in one instance and non-foundationalism is another (see Smith and Deemer 2000; Smith and Hodkinson 2005). Probably more than any other idea, the realization that there can be no theory-free observation or knowledge, no matter how much one might desire them, has had a major impact on the philosophy of (social) science and is beginning to have a major impact on the issue of how to judge research quality.

Neorealism and Relativism

Among those who advocate what can be loosely referred to as neorealism, there are numerous variations on the theme. As is the case for all philosophical schools of thought or “isms,” neorealism is best seen as a family of very often densely argued positions. The list of modifiers after the demise of direct realism have proliferated over the years from scientific (Thomas 1979; Trigg 1985) to transcendental (Bhaskar 1979), which blended into critical (Archer et al. 1998) to “moderate” (Haack 1998), and so on. There is no need to go into the differences, often subtle, among neorealists because it is what they hold in common that is of greatest interest for the issue of judging research quality.

Any discussion of how to judge quality must be played out within the framework of a commitment to ontological realism on the one side and, on the other, an obligation to accept a constructivist epistemology. The former commits neorealists to the proposition that there is a real world out there independent of our interest in or knowledge of that world. This is a world that can be known, *at least in principle*, as it really is. Because this is the case, it is reality itself that sets limits on our knowledge or, put differently, allows us to sort out the true from the false, the warranted from the unwarranted, high quality research from low quality research, and so on. The latter announces the recognition that we can never know for sure if we have depicted or described reality as it really is and, thus, leads to the question – at least for the critics of neorealism – about whether the neorealists can make their ontological commitment do the work required of it. In short, nonnaive realists or neorealists have had to negotiate between “a belief in a real world independent of our knowledge [and a belief] that our knowledge of this metacognitive world is quite fallible” (Leary 1984, p. 918).

Those who have adopted what can loosely be called a relativist position are unconvinced by the neorealist attempts to couple together a neorealist ontology with a fallible epistemology and thereby salvage, as relativists see it, some remnants of the logical positivist project. Further, the relativists say the neorealists have offered no convincing argument that reality itself can accomplish what is asked of it – be the outside of us referent point that we can appeal in order to sort out warranted from unwarranted knowledge claims, the true from the false, and the quality of research. At the center of their rejection of the neorealist arguments is a concern about language – *pace* Wittgenstein, the meaning of a word is not the object, but its use. Drawing on this insight, Rorty (1989) puts it as follows: “We need to make a distinction between the claim that the world is out there and the claim that truth is out there. To say that the world is out there, that it is not our creation, is to say, with common

sense, that most things in space and time are the effects of causes which do not include human mental states. To say that truth is not out there is simply to say that where there are no sentences there is no truth, that sentences are elements of human languages, and that human languages are human creations” (pp. 4–5).

As is the case with neorealism, the label relativism includes any number of variations on theme that traffic under the banners of hermeneutics, neopragmatism, postmodernism, and so on. While the differences among these perspectives are of interest, for our purposes it is important to focus on a broad idea they share in common: our judgments about knowledge and research quality are, and can never be anything else than, time and place contingent. The time has arrived to abandon any hopes for a foundation for our knowledge; we need to change our metaphors and imageries from those of discovery/finding to those of constructing/making and to accept that relativism is our inescapable condition as finite human beings.

In making this claim, there are two criticisms to which relativists have had to respond. The first is the well-traveled claim that relativism is self-refuting. The refrain here is well-known: To say that all things are relative is to make an absolute or nonrelative statement. As such relativism is self-refuting and an untenable position. Those who have been labeled relativists shrug off this charge. For example, Gadamer (1995) says that to make this point is to make a point of no interest, or one that does “not express any superior insight of value” (p. 344). Rorty’s (1985) approach to the issue is to say that it is wrong to think of relativism as a theory of knowledge. He then dispenses with the self-refuting argument by saying that because neopragmatists are not interested in theories of knowledge or advancing any “epistemology, *a fortiori* he does not have a relativistic one” (p. 6).

The second charge is that relativism leaves us enmeshed in an intolerable condition of “anything goes.” Any judgment about knowledge, moral values, and research quality must be seen as equal to every other judgment about knowledge, values, and quality. This leads us into the abyss where nothing can be sorted out. The response from relativists is that it is nonsense to define relativism as anything goes. On the one hand, for this anything goes definition to make sense requires a viable conception of objectivity or the absolute. Since this is no longer possible, to refer once again to Hazelrigg (1995), because we can no longer speak of the absolute without embarrassment, we can no longer speak of anything goes without embarrassment. Objectivity and relativism are dyadic terms – terms where the meaning of one of them requires the meaning of the other in the pair. If one of the pair loses its original meaning, as the relativists claim is the case for certitude via objectivity, then the other loses its original meaning. Moreover, as a practical matter,

relativists argue that we all already do make judgments and will continue to do so as far as one can see in the future. It is impossible to imagine someone leading a life without making judgments or discriminations. The issue is not anything goes, it is whether our judgments are time and place contingent (hence relative to time and place), or if they can be grounded beyond these contingencies (as in an independently existing reality known as it really is). Obviously, relativists embrace the former and say they have seen no argument from the neorealists that a foundation for our knowledge is possible.

Finally, a deeply felt concern by neorealists is that if there is no way to sort out knowledge claims by calling on something out side of us (reality itself), we enter the very dangerous territory of power deciding everything, including educational policies. The claim that educational researchers could “speak truth to power” of politicians and interest groups would become meaningless in that all researchers could do is offer an “opinion to power.” Pring (2000) brings this fear to the front when he notes that the problem of everything becoming a matter of power “arises because of the severance of knowledge and understanding from some notion of reality independent of our construction of it. The one guarantee of freedom is that there are constraints on our construction of reality, namely, reality itself, and it is always possible to challenge others’ ideas and ‘constructions’ in the light of what is the case” (p. 55).

At one level, the relativist response is on the order of “what’s new,” power has always been the issue regardless of the neorealist claims to having made a contact with reality, most especially in the instance of social research in education. At another level, Hazelrigg (1995) argues that to fear power in this way is to engage in some sort of “intellectualist flight from power” (p. 202). Because nothing can happen for good or bad without power, power itself is not the issue, but how power it is exercised is. Since relativists hold that it is not possible to challenge others in light of what is the case, the task is to distinguish between the responsible and beneficial versus the excessive and damaging uses of power. And, most significantly, such decisions are moral choices and not scientific, technical or instrumentalist ones.

The philosophical lines of our age have been drawn (Smith 1993). On the neorealist side there is the claim that there must be something outside of ourselves – an independently existing social reality—which we can call upon to sort out different claims to knowledge. The relativists argue back that the ultimate implication of no theory-free knowledge is that social reality cannot accomplish the task required of it by the neorealists; once one climbs aboard the train of a fallible epistemology there is no station at which to get off that can be anything more than arbitrarily chosen. The neorealists further contend that because the whole point of social science is the pursuit of truth, if true from false knowledge claims cannot be

sorted out, then there is no point to doing social research. The relativists counter that people can continue to talk about truth and so on – as long as it is recognized that the concept is a matter of time and place contingent agreement and not one that can be referenced to depicting reality as it really is. And, so the discussion goes in the philosophical literature ranging around whether we should see ourselves in terms of metaphors of finding or discovering reality or the metaphors of making or constructing reality. This discussion, without any doubt, has profound consequences for how we judge research quality.

Judging Research Quality

As educational researchers have become increasingly aware of the philosophical uneasiness noted above, it is not surprising that how we judge research quality has itself become a problematic issue. However, in that ideas always spread unevenly amongst large and loosely joined social groups such as the educational research “community,” it is fair to say that there are now three broad perspectives on research quality.

The majority of educational researchers remain under the influence of positivistic forms of empiricism, a more rather than less sense of direct realism, and the scientific for advocates – or scientific as the critics prefer – approach to research quality. Methodical criteria, which are thought of as universal or not contingent on time and place, remain the foundation for sorting out quality from less quality research – or, as the issue is now commonly expressed, rigorous from less rigorous research. The most important example of this scientific/scientistic perspective in the United States is the National Research Council report entitled *Scientific Research in Education* (Shavelson and Towne 2002). This report follows the No Child Left Behind legislation by a year or so, but it is arguably the intellectual justification for the legislation’s assertion that the most rigorous studies are those which are scientific, which in turn are those which employ experimental and quasiexperimental designs. As they note, “All scientific studies must pose clear questions. . . . more rigorous studies begin with more precise statements of the underlying theory driving the inquiry and will generally have a well-specified hypothesis before the data collection and testing phase is begun. Studies that do not start with clear conceptual frameworks and hypotheses may still be scientific, although they are *obviously at a more rudimentary level* and will generally require follow-on study to contribute to scientific knowledge” (p. 101, emphasis added).

While the report mentions some the philosophical arguments noted above, the authors are reluctant to address the full impact of those arguments for the issue of quality research. For example, the report cites Kuhn (1962) on the

very important idea that all observations are theory-laden and hence there can be no theory-free knowledge, but the authors limit the import of this idea to “the choice of what to observe and how to observe it” (p. 62). What they fail to address is that the idea of no theory-free observation cuts much deeper to the level of the interpretations given to observations, not merely what to observe and how to observe it. Finally, even though the report includes disclaimers that method is not the sole basis for judging rigor (quality) in research, there is little doubt that it is by far the dominant basis for such judgments. The authors note that research which finds causal effects – knowledge of prediction and control – is the name of the game (pp. 97–126). In that since the time of Mill and his logical canons, the only methods we have for finding causal relationships are those known as experimental (Cohen and Nagel 1934), as is the case for the physical sciences, the most rigorous, highest quality research is defined by method.

Over the last few decades numerous educational researchers, influenced by changes in the philosophy of social science, have moved away from positivistic versions of empirical realism via direct realism and the methods-quality research linkage to one degree or another. The origin of this movement can be traced back to the interest in qualitative research that began in the 1980s. However, the important point to note about the qualitative movement is that it has never been monolithic in philosophical terms. Amongst those who think of themselves as qualitative researchers there has been a difference between realists, both neo and more direct, and relativists. This is a clash that has had and almost certainly will continue to have major consequences for our judgments about the quality of research. It is of interest to offer a brief word or two about the history of this situation (see Denzin and Lincoln 2000, 2005, for an excellent overview of the competing lines of thought amongst qualitative researchers).

From early on a range of qualitative educational researchers (Guba 1990; Lather 1986, 1993; Lincoln 1995; Lincoln and Guba 1985; Schwandt 1989, 1996; Smith 1984, 1989, 1990, 1993, 1996) have advanced what might be called a subversive or relativist stance with regard to the dominance of the empirical research sponsored by positivism and post-positivism that overwhelmingly dominated the field. Influenced by hermeneutics, neopragmatism, postmodernism, and so on, this group was uninterested in methods per se and most especially, could see no way to confine the judgments about quality research to judgments about the proper research procedures, properly executed.

On the other side, with at least some degree of recognition of philosophical changes, adopting a vaguely tempered empirical-realist position, were those qualitative researchers who were interested in maintaining a very substantial role for a methodical version of qualitative research. LeCompte and Goetz (1982) and Miles and Huberman (1984a, b)

were prominent examples of those who attempted to forge a strong link between judgments about the quality of research and the methods employed by the researcher. Because they recognized that something was going on philosophically, they made reference to philosophical concerns, but in the end they asserted a defining role for method. Miles and Huberman (1984a) were making reference to the philosophical changes when they said they were “middle-range epistemologists” and “soft-nosed positivists” (p. 21), but because they thought “epistemological purity doesn’t get research done,” the important task was to make qualitative inquiry “scientific in the positivist sense of the word” (p. 21) by developing a “body of clearly-defined methods for drawing validity from qualitative data” (ibid.). (Smith and Heshusius 1986, offer an extended critique of this method-driven version of qualitative research.)

So where do things stand today when it comes to the limits and possibilities for judging research quality? As noted above, there are still those who advocate a methodical approach, but they do so without taking into account the major changes that have occurred in the philosophy of social science – most especially, they have not recognized the full implications of no theory-free observation/knowledge. One might easily conclude that the end is in sight for those who advance a central role for method and that they might wish to heed Bernstein (1983) when he says that “the search for method (when this is conceived of as a set of permanent, unambiguous rules) needs to be abandoned” (p. 74). Philosophically, at this moment in history anyway, positivistic versions of empirical realism have been eclipsed and the two main lines of thought behind educational research are neorealism and relativism. What each “ism” offers for our judgments about quality research is best depicted by focusing on exemplars from each position – people who have directly addressing research quality in the light of a careful consideration of these philosophical dispositions.

The neorealist educational researchers have abandoned the methods-quality research linkage and agree with Hirsch (1967) that “there are no [fixed] interpretive rules” (p. 202) and there “is not and cannot be any method or model of correct interpretation” (p. 206). However, there can be a “ruthlessly critical process of validation” (p. 206) that honors the regulative ideal of a search for truth – in Hirsch’s case this applies in particular to the discovery of an author’s intent. Two of the most influential people amongst educational researcher who have followed Hirsch’s lead are Maxwell (1992) and Hammersley (1990). The former has argued that judgments of validity (quality) of qualitative studies are possible. He noted that one can think in terms of five aspects or levels of validity: descriptive, interpretive, theoretical, generalizability, and evaluative. The most important of these is descriptive validity, which is a basic judgment about whether or not researchers are “making up or distorting what they saw and heard” (p. 285). This is a not

a call to direct realism, but to neorealism because he further recognizes that descriptive validity is “by no means independent of theory . . . even if this theory is implicit or common sense” (p. 287). This neorealism is also apparent in his following comment that “Descriptive understanding pertains, by definition, to matters for which we have a framework for resolving such disagreement, a framework provided in large part by taken-for-granted ideas about time, space, physical objects, behavior, and our perception of these” (p. 286). In a sense, this resonates with Pring’s Durkheim (1982) inspired comments about the social and educational as inherited “givens,” meaning that we are all born into a world of social facts just as we are into a world of physical facts (Pring 2000). And, in both instances, we can know (at least in principle?) when we have accurately or inaccurately described these facts.

In another excellent example of this neorealist approach to quality, Hammersley (1990) argues that we do not have to dispense with “the concept of truth as correspondence to an independent reality. We can retain this concept of truth by adopting a more subtle realism” (p. 61). Following this assertion, he goes on to say that research accounts can be validated through judgments about the “likelihood of error” (p. 61). The two key elements of validity (quality) are plausibility – “whether we judge [a claim to knowledge] as likely to be true given our existing knowledge” (p. 61) and credibility – whether a claim to knowledge is credible “given the nature of the phenomena concerned [and] the circumstances of the research” (p. 61).

The common desire expressed by Hammersley (1990), Maxwell (1992), and other neorealists, is to thread a line between the idea of an independently existing reality and the idea that we can never know if we have depicted this reality as it really is. This dual commitment means that the criteria they offer for judging the quality of research obviously cannot offer certitude, but presumably they can prevent a descent into a relativism of “anything goes,” where power is the only way to sort out different claims to knowledge.

Researchers of a relativist disposition have argued that the neorealists have not made their case or found that in-between line they so desire. They have argued that once one accepts a fallible epistemology, in effect one has given up on epistemology altogether and it is time to realize that “the value of any cooperative human inquiry has only an ethical base, not an epistemological or metaphysical one” (Rorty 1985, p. 6). Relativists argue that the neorealist idea of some sort of a “modified certitude,” “partial objectivity,” or to say that the world can be “known only under particular descriptions and is in *that limited sense, epistemological relative*” (House 1991, p. 5, emphasis added) is unintelligible. As a consequence, they maintain that while there are criteria for sorting out the quality of research, these criteria cannot stand free in any way from the contingencies of time and place.

The critique of realism and neorealism and the hope for non-contingent criteria for judging the quality of educational can readily be seen in work of Smith (1989, 1993) and Schwandt (1989, 1996). The latter summarized this relativist or nonfoundationalist line of thought quite succinctly: “We must learn to live with uncertainty, with the absence of final vindications, without the hope of solutions in the form of epistemological guarantees. Contingency, dialogue, and deliberation mark out our way of being in the world. But these ontological conditions are not the equivalent to eternal ambiguity, the lack of commitment, the inability to act in the face of uncertainty” (Schwandt 1996, p. 59).

Smith argues that the criteria for judging research quality are not standards, rather they must be thought of in terms of a list of characteristics. That is, as one approaches the task of judging research quality, one has in mind a list of items, bolstered by reference to exemplars of the genre, that characterize good research. This is not a fixed list with precisely defined items. To the contrary, the list is always open-ended with the ever present possibility that items can be added and removed and given more importance and less importance as they are applied in practice. Moreover, the individual items on the list are never fully articulated and are themselves always open to interpretation and reinterpretation.

What is important to realize about criteria as lists is that the lists and individual items are not challenged, changed and modified through abstract epistemological discussions, but rather through practical application to and practical reasoning about actual research studies (see the exchange between Hammersley 2009a, b, and Smith and Hodgkinson 2009). That is, quite often something “new” comes along, such as Sparkes’ (1996) self-reflective narrative of the fragile body-self and, more generally, the entire genre of autoethnography, the does not fit with the existing list of characteristics. When this happens, either lists are reformulated to include the “new,” or the existing lists are preserved and the research is judged as lacking quality or it can be deemed as not even qualifying as research.

This playing out of what to do about quality judgments in response to something “new” is evident in the early reception given to qualitative research. When qualitative research began to become increasing popular in the 1980s, it clearly did not “fit” with the criteria dominant at that time for sorting out good from bad research. The issue at contest was either to maintain the methodical criteria of positivist or scientific empirical inquiry, or to modify and broaden the list of characteristics to include the “new.” In this particular instance, but not without a struggle, the latter obviously prevailed (see, Smith 1996, for an interpretation of why this happened).

This idea that quality judgments about educational research (and social research in general) are time and place contingent and respond to the practical task of making judgments of quality, can be illuminated in a broader context with a reference to the different ways academic life is structured in the United Kingdom and United States, versus Germany. In the latter, the academic world traditionally has been divided into the natural sciences and the moral sciences, which includes the humanities and the social sciences. For the former there is a three part division among the natural sciences, the social sciences, and the humanities. In the United Kingdom and United States there has always been a lingering question as to whether the social science building should be nestled up against the physics building or placed across campus next to the humanities building (an issue which received a rare open expression when Samuel Huntington, a very well-known and respected political scientist was not accepted into the prestigious National Academy of Scientists, Boffey 1987). Neorealists want to keep the social closer to the physical, as noted above, while relativists argue we should see ourselves as continuous with the humanities. And, if this is so, then our approach to quality research will have much more in common with how the arts are judged rather than with the methodical judgments made in physical research.

The example of how the quality of music compositions are judged over time illustrates this situation. Tchaikovsky's work, which is now universally admired and repeatedly performed, was initially denigrated by connoisseurs and musicians as the work of "nothing but a weeping machine" (Schonberg 1970). His Violin Concerto in D, which is now considered a masterpiece, premiered to catcalls from the audience and the critical reaction that it was not even a violin concerto, but rather a composition designed to torture the violin. The same can be said of Stravinsky's *Le Sacre du Printemps*. The premiere in Paris in 1913 provoked a scandal with shouted insults, laughter, whistles, and an attempt to turn the lights off and on to restore order. While today his work does not have as wide an appeal as the work of others, there is no question that many critics admire it greatly. The point is that in the arts works are produced that challenge the existing list of characteristics of what is a quality composition, painting, or whatever. Over time the list either changes to accommodate the "new," or the "new" is consigned to the sidelines forever. Why one or the other happens – who knows? But, for relativists the example of artistic judgment tells us much as about research judgment.

Conclusion

What once seemed reasonably well settled when direct realist forms of empiricism dominated the philosophical landscape is now highly contested. The idea that judgments

about educational research quality which could respond to the proper methods, properly applied, at least in the sense of a necessary if not sufficient condition of quality research, has been seriously undermined. This has led to a vibrant discussion between advocates of two broad philosophical dispositions – neorealism in its various guises and relativism in its various guises.

For the former the task has been to assemble a coherent position that preserves a less than direct or naïve realism combined with a fallible epistemology. In doing so they desire to justify the claim that reality itself can serve as the ultimate referent point for adjudicating different claims to knowledge and for sorting out good from bad research. And, there are criteria, be they plausibility and credibility or whatever, that can be applied to make these decisions. For the neorealists this is a very serious issue because without the real as a point of reference and a more or less non-contingent criteria for judgment, there is nothing to prevent a descent into an anything goes relativism; decisions about quality research will respond only to power. The idea that educational researchers can speak truth to the power of policy makers will be gone.

Relativist argue back that the changes in the philosophy of social science, in particular no theory-free observation or knowledge, undermine the idea that the hope for a convincing fallible epistemology because to be fallible means that we can never know if we got it right or spoken the truth. As human beings we must recognize our finitude and understand that our judgments, including those made about the quality of research, are contingent on time and place. What is quality research at any given time and place results from conversation and persuasion amongst us as researchers, and when we change, what we think of as quality research will change.

The philosophical discussions of the recent past have eliminated the methodical or rule driven approach to quality research and left us with two broad ways to assess the limits and possibilities of sorting out the good from the not-so-good in educational research. This is an assessment which, in turn, has very profound implications for how we think of what we do and who we are as educational researchers.

Note on Contributor

John K. Smith is Professor Emeritus at the University of Northern Iowa. He has studied and written about the issue of criteria for judging social research for the last 30 years. His writings on this topic include two books, *The Nature of Social and Educational Inquiry: Empiricism versus Interpretation*, and, *After the Demise of Empiricism: The Problem of Judging Social and Educational Inquiry*, and numerous articles and book chapters on these matters.

References

- Abel T (1948) The operation called *verstehen*. *Am J Sociol* 54(3):211–218
- Andreski S (1972) *Social sciences as sorcery*. Andre Duetsch, London
- Archer M, Bhasker R, Collier A, Lawson T, Norrie A (1998) *Critical realism: essential readings*. Routledge, London
- Bauman Z (1978) *Hermeneutics and social science*. Century Hutchinson, London
- Bernstein R (1983) *Beyond objectivism and relativism*. University of Pennsylvania Press, Philadelphia
- Bhaskar R (1979) *The possibility of naturalism*. Humanities Press, Atlantic Highlands
- Boffey P (1987) Prominent Harvard Scholar Barred by Science Academy, *New York Times*. Apr 29
- Cohen M, Nagel E (1934) *An introduction to the logic of scientific method*. Harcourt, Brace, and World, New York
- Denzin N, Lincoln Y (2000) Introduction: the discipline and practice of qualitative research. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 2nd edn. Sage, Thousand Oaks, pp 1–28
- Denzin N, Lincoln Y (2005) Introduction: the discipline and practice of qualitative research. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 1–32
- Durkheim E (1982) *The Rules of the Sociological Method* (ed: S. Lukes, trans: Hall WD). Free Press, New York
- Furner M (1975) *Advocacy and objectivity*. University of Kentucky Press, Lexington
- Gadamer H-G (1995) *Truth and method*, 2nd revised edn (trans: Weinsheimer J, Marshall DG). Crossroad, New York
- Giddens A (1976) *New rules of the sociological method: a positive critique of interpretive sociologies*. Hutchinson, London
- Goodman N (1978) *Ways of worldmaking*. Jackett, Indianapolis
- Gouldner A (1970) *The coming crisis of western sociology*. Basic Books, New York
- Guba E (1990) The alternative paradigm dialog. In: Guba E (ed) *The paradigm dialog*. Sage, Newbury Park, pp 17–30
- Haack S (1998) *Manifesto of a passionate moderate*. University of Chicago Press, Chicago
- Hammersley M (1990) *Reading ethnographic research: a critical guide*. Longman, London
- Hammersley M (2009a) Challenging relativism: the problem of assessment criteria. *Qual Inq* 15(1):3–29
- Hammersley M (2009b) Closing down the conversation? A reply to Smith and Hodkinson. *Qual Inq* 15(1):40–48
- Hanson N (1958) *Patterns of discovery*. Cambridge University Press, Cambridge
- Hazelrigg L (1995) *Cultures of nature*. Florida State University Press, Tallahassee
- Hesse M (1980) *Revolutions and reconstructions in the philosophy of science*. Harvester, Brighton
- Hirsch E (1967) *Validity in interpretation*. University of Chicago Press, Chicago
- House E (1991) Realism in research. *Educ Res* 20(6):2–9
- Kerlinger F (1979) *Behaviorial research*. Holt, Rinehart, & Winston, New York
- Kuhn TS (1962) *The structure of scientific revolutions*. University of Chicago Press, Chicago
- Lather P (1986) Issues of validity in openly ideological research: between a rock and a soft place. *Interchange* 17(4):63–84
- Lather P (1993) Fertile obsession: validity after poststructuralism. *Social Quart* 34(4):673–693
- Leary D (1984) Philosophy, psychology, and reality. *Am Psychol* 39(8):917–919
- LeCompte M, Goetz J (1982) Problems of reliability and validity in ethnographic research. *Rev Educ Res* 52(2):31–60
- Lincoln Y (1995) Emerging criteria for judging quality in qualitative and interpretive research. *Qual Inq* 1(3):275–289
- Lincoln Y, Guba E (1985) *Naturalistic inquiry*. Sage, Beverly Hills
- Lynd R (1939) *Knowledge for what? The place of social science in American culture*. Princeton University Press, Princeton
- MacKenzie D (1981) *Statistics in great Britain: 1885–1930*. Edinburgh University Press, Edinburgh
- Maxwell J (1992) Understanding and validity in qualitative research. *Harvard Educ Rev* 62(3):279–300
- Miles M, Huberman A (1984a) Drawing valid meaning from qualitative data: toward a shared craft. *Educ Res* 13(5):20–30
- Miles M, Huberman A (1984b) *Qualitative data analysis*. Sage, Beverly Hills
- Mills CW (1959) *The sociological imagination*. Oxford University Press, New York
- Pring R (2000) *Philosophy of educational research*. Continuum, London
- Putman H (1981) *Reason, truth, and history*. Cambridge University Press, Cambridge
- Rorty R (1979) *Philosophy and the mirror of nature*. Princeton University Press, Princeton
- Rorty R (1985) Solidarity or objectivity? In: Rajchman J, West C (eds) *Post-analytic philosophy*. Columbia University Press, New York, pp 3–19
- Rorty R (1989) *Contingency, irony, and solidarity*. Cambridge University Press, Cambridge
- Ross D (1991) *The origins of American social science*. Cambridge University Press, Cambridge
- Schonberg H (1970) *The lives of the great composers*. W. W. Norton, New York
- Schwandt T (1989) Recapturing moral discourse in evaluation. *Educ Res* 18(8):11–16
- Schwandt T (1996) Farewell to criteriology. *Qual Inq* 2(1):58–72
- Shavelson R, Towne L (eds) (2002) *Scientific research in education*. National Academy Press, Washington
- Slavin R (2002) Evidence-based education policies: transforming educational practice and research. *Educ Res* 31(7):15–21
- Smith J (1984) The problem of criteria for judging interpretive inquiry. *Educ Eval Policy An* 6(4):379–392
- Smith J (1985) Social reality as mind-dependent versus mind-independent and the interpretation of test validity. *J Res Dev Educ* 19(1):1–9
- Smith J (1989) *The nature of social and educational inquiry: empiricism versus interpretation*. Ablex, Norwood
- Smith J (1990) Alternative research paradigms and the problem of criteria. In: Guba E (ed) *The paradigm dialog*. Sage, Beverly Hills, pp 167–187
- Smith J (1993) *After the demise of empiricism: the problem of judging social and educational inquiry*. Ablex, Norwood
- Smith J (1996) The stories educational researchers tell about themselves. *Educ Res* 26(5):4–11
- Smith J, Deemer D (2000) The problem of criteria in the age of relativism. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 2nd edn. Sage, Thousand Oaks, pp 877–896
- Smith J, Heshusius L (1986) Closing down the conversation: the end of the qualitative-quantitative debate. *Educ Res* 15(1):4–12
- Smith J, Hodkinson P (2005) Relativism, criteria, and politics. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 915–932

- Smith JK, Hodkinson P (2009) Challenging neorealism: a response to Hammersley. *Qual Inq* 15(1):30–39
- Smith M (1994) *Social science in the crucible*. Duke University Press, Durham
- Sparkes A (1996) The fatal flaw: a narrative of the fragile body-self. *Qual Inq* 2(4):462–494
- Taylor C (1971) Interpretation and the science of man. *Rev Metaphys* 25(1):3–51
- Thomas D (1979) *Naturalism and social science*. Cambridge University Press, Cambridge
- Trigg R (1985) *Understanding social science*. Blackwell, Oxford
- Yolton J (1977) *The Locke reader*. Cambridge University Press, Cambridge

Martyn Hammersley

Abstract

This commentary outlines and assesses John K. Smith's account of how quality should be assessed in educational research. We agree on the importance of this issue, and both of us reject a positivist approach that is preoccupied with identifying and applying 'transparent' procedures. However, we are some distance apart in our views about the criteria by which and ways in which research findings should be evaluated. I argue that Smith's position involves fundamental problems. Some of these relate to the accuracy of his account of epistemological positions, notably those he rejects. However, the main issues concern the self-refuting character of relativism, and the inadequacy of his response to this problem.

Keywords

Research quality • Validity • Realism • Relativism • Foundationalism

Smith (2013) presents the issue of quality in educational research as a practical problem, one that arises in a number of contexts: carrying out primary research, reviewing research literatures, serving as a referee for journals or for funding bodies, and assessing students' work. For Smith, the issue is how to resolve disagreement among researchers; and he notes that disputes about how quality ought to be judged have become much more common in recent decades.

Smith's chapter provides a brief historical account of how a particular way of thinking about research quality, one that focuses on method (in particular, the measurement and control of variables), came to be dominant in the first half of the twentieth century. He labels this a positivistic version of empirical realism (p. 22) (it is more or less equivalent to what others have called positivism). Smith also notes how this approach was subsequently challenged and deposed from its dominant position in some quarters, leading to the present state of uncertainty. He then outlines a dispute between what he sees as 'neo-realist' attempts to preserve a modified version of positivistic

empiricism, on the one hand, and the relativist position that he and some other social and educational researchers champion, on the other. From the relativist point of view, assessing the quality of research does not focus upon method, or in fact involve judgments about the truth or falsity of knowledge claims. Rather, assessment should be ethical and/or aesthetic in character, and will necessarily rely upon considerations that are contingent in relation to time and place.

There are many questions that could be asked about Smith's account, including:

1. Is the key issue how disagreement among social scientists can be practically resolved? Or is it, instead, the question of how we *ought to* assess research?
2. Does Smith give an accurate account of the history of educational research methodology?
3. Is he right to put empiricism and realism together?
4. Does he provide a sound history of epistemological views in philosophy?
5. Has he taken adequate account of the questions that have been raised about his own relativist position?

I do not have the space to address these questions in any detail here, but in my view there are serious problems with some aspects of his discussion (see Hammersley 1992, Chapter 4, 1998a, 1998b, 2009a; see also Smith and

M. Hammersley (✉)
Faculty of Education and Language Studies, Open University,
Buckinghamshire, UK
e-mail: martyn.hammersley@open.ac.uk

Hodkinson 2009, and Hammersley 2009b). It seems to me that the focus must be on how we *ought to* assess research. Furthermore, I do not find Smith's account of epistemological views entirely accurate, for example empiricism and realism are distinct positions. Moreover, as will become clear from what follows, I believe that there are fundamental problems with Smith's relativism.

There are also some more specific issues that can be raised about Smith's position, and I will provide brief commentaries on these:

1. What does it mean to say that all knowledge is theory-laden? There is an important distinction to be drawn between the idea that all observation (in fact, all argument) relies upon assumptions and the claim that we can only see and hear what we assume, on the basis of theory, to be there. Some methodologists, whom Smith would probably label 'neo-realists', argue that the *possibilities* of what we can see and hear are set by our assumptions but that *which* particular possibilities are realised on any particular occasion is not. Moreover, they claim that we are able to engage in reasoned questioning of our assumptions, and can change at least some of them if they are judged to be false, enabling us to recognise new perceptual realities. From this point of view, even if 'theory-ladenness' refers to a *tendency* to see certain things rather than others, and one way rather than another, it is a tendency which can be overcome by more careful thinking, looking or listening. What needs to be underlined here is that not only is the meaning of the phrase 'theory-ladenness' open to various interpretations but these have significantly different implications for what epistemological conclusions we can or should draw from them. For example, if the argument is that all observation involves assumptions, and that these assumptions entirely determine what we perceive, then of course there is no possibility of our gaining knowledge about anything that is independent of our perceptions. On the other hand, if our assumptions simply set current possibilities for what can be perceived, ones that are revisable, and/or set up a tendency to perceive things in particular ways that can be corrected where necessary, then what we perceive is not in any strong sense relative to, or determined by, our assumptions. On this interpretation 'theory-ladenness' has much less radical epistemological implications.
2. What does it mean to say that there can be no *foundation* for research knowledge? Again, there are significantly different ways in which this could be interpreted. The word 'foundation' is sometimes used to refer to a body of knowledge whose validity is absolutely certain. But it can also mean knowledge or evidence whose validity can reasonably be taken as given until further notice; in other words, accepted until and unless we discover that there is a strong likelihood that it is false. In fact, given the assumption-ladenness of all argument, if there were no foundation in the second sense then we would be obliged to try to doubt the validity of all our assumptions. At the same time, we would never be able to exercise this doubt, since in order to question anything it is necessary to take something else for granted. If I ask 'Is knowledge of the social world possible?', I am necessarily assuming that there is a social world to have knowledge about, that the words I am using have meanings, that this is a question to which a reasonable answer could be given, and so on. And, of course, if I come to the conclusion that no knowledge is possible, I am still claiming to know that this is true. What we mean by 'foundation' and 'foundationalism' carries implications for what conclusions we draw from the claim that there can be no foundation for research knowledge (Haack 1993, 2003). And, as I have indicated, the more radical, relativist interpretation seems self-contradictory.
3. Does a realist have to believe that there is a reality separate from the knower, and perhaps also a reality which has fixed, intrinsic features? There are many types of realist. For example, Hilary Putnam, whom Smith cites in support of his case, has described his position as 'internal realism' and distinguishes it from relativism and scepticism (Anderson 2006). Furthermore, there is certainly no reason why a realist should believe that the knower exists outside of reality. All that probably must be assumed is that there are things independent of the knowledge claims we make about them, such that those claims could be false, in the sense of not corresponding to how they are. Moreover, rather than thinking of the features of things as existing completely independently of the researcher, we perhaps can recognize that any account of phenomena we provide amounts to a candidate set of answers to questions posed about those phenomena, and that different questions could generate different, equally true (though, a realist would claim, not contradictory) answers.
4. What does it mean to say that our assessments of knowledge and research quality are 'time and place contingent'? Does it mean that an assessment that was true at one time becomes false at another (without any change in the world), or that people in different places can make contradictory assessments and yet all be right? If this interpretation is intended, Smith seems to have emptied the meaning out of words like 'belief', 'knowledge', and 'research quality' in much the same manner as he claims has happened to 'objectivity'. In which case, it is hard to understand how we can talk or write about research quality. Or does 'contingency' imply simply that the terms in which we would assess research quality might differ across tasks? It is certainly true that we are likely to

take somewhat different considerations into account when assessing a candidate knowledge claim in the course of inquiry, when reviewing an article for a journal, or when evaluating the work of a student (Hammersley 2008). But should not the general standards to which these considerations are relevant be fairly consistent: for example, should we not assess all PhD theses in terms of the same general standards on each occasion; and ought we not to assess knowledge claims that seem to support our own political commitments in more or less the same methodological terms as those that do not?

5. Is 'constructing/making' any less of a metaphor than 'discovering/finding'? And, if they are both metaphors, perhaps we should not assume that either captures everything that is important about the process of inquiry. It is not unreasonable to conclude that we need both metaphors, and possibly others too, in helping us to understand what is involved. We must also ask: Does treating inquiry as constructing/making mean that writing an educational research report is the same as writing a novel or a poem? If so, what justification can there be for claiming to be involved in an activity called research – should we not simply join the novelists and the poets? If not, on what grounds can the difference be established, within the framework of constructing/making? There is something to be gained by looking at the similarities between constructing fictional accounts and constructing research reports, but there is also a great deal to be lost by assuming that they are the same activity. We need to consider the differences as well as the similarities, and the notion of construction may not enable us to do this.
6. Assuming the accuracy of Smith's account of Gadamer's and Rorty's responses to the charge that relativism is self-refuting, and there are doubts about this in the case of the former (Hammersley 2009a), are these responses convincing? Smith presents them as if their validity were immediately obvious. But how convincing is a shrug in answer to this challenge? And is Rorty right to assume that he can escape making any epistemological assumptions? Given the assumption-laden character of all argument, how could this be possible? Surely, the self-refuting paradox of relativism is not so easily avoided?
7. Is the argument that 'it is nonsense to define relativism as anything goes' (p. 15) a statement whose validity is intended to be relative to the philosophical assumptions adopted by Smithian relativists, or is universal validity being claimed for it? If the former, Smith would have to recognize that the statement is false for non-relativists. Alternatively, if he is claiming universal validity for it, on what foundation is he relying, or could he rely? This is a practical exemplification of the consequences

of relativism's internal inconsistency or paradoxical character. In fact, the point is a larger one: on what grounds could Smith possibly believe that he can demonstrate that neo-realism is false and relativism true? Yet this is what he seems to be attempting throughout his chapter.

8. Does Smith believe that there are grounds (foundations?) for judgments about what is 'responsible and beneficial versus excessive and damaging' (p. 17) while assuming that there are none for judgments about truth or falsity? On what basis did he reach this conclusion, and on what grounds does he expect readers to accept it? It is rather surprising to claim that we can make judgments about what is good or bad, and presumably resolve disagreements about these matters, but that we cannot do this as regards the validity of knowledge claims. After all, on the face of it, we do both all the time; and judgments of what is good or bad, especially about what is 'beneficial', necessarily rely upon subordinate epistemic assumptions (for example, about the nature of some situation, about what caused what, about what will probably lead to what in the future, and so on) that are taken to be true. Perhaps Smith's argument is that in judging the validity of knowledge claims we must also take aesthetic and ethical considerations into account? If so, this is an interesting idea that has been explored in philosophy; but it is also one that involves problems and carries dangers, for example of simply believing what we hope is true (see Hollinger 1997).
9. How close is the analogy between how we actually do, and should, judge pieces of classical music and how we judge, and should judge, pieces of educational research? There may be similarities here, but are there not also important differences? Smith concludes his argument by drawing this parallel, but he does not demonstrate that it is a close one. Furthermore, he seems to present responses to different sorts of music and how these have changed over time as matters of taste that are not subject to rational assessment, and certainly not in terms of general considerations. But does he establish this point, even for the case of music?

There are, then, some difficult philosophical issues raised by Smith's chapter. These form part of the complex methodological terrain that educational research now inhabits (see Hammersley 2007).

Note on Contributor

Martyn Hammersley is Professor of Educational and Social Research at Open University. He has carried out research in the sociology of education and the sociology of the media. However, much of his work has been concerned with the methodological issues surrounding social enquiry. He has written several books, including: *Reading Ethnographic*

Research (1991), *What's Wrong with Ethnography?* (1992), *The Politics of Social Research* (1995), *Taking Sides in Social Research* (1999), *Educational Research, Policymaking and Practice* (2002), and *Questioning Qualitative Inquiry* (2008), *Methodology: Who Needs It?* (2011), *The Myth of Research-Based Policy and Practice* (2013), and *What is Qualitative Research?* (2013).

References

- Anderson J (2006) 'Hilary Putnam's internal realism briefly explained'. Available at: http://fs6.depauw.edu/~jeremyanderson/teach/101_putnam.html. Accessed 09 Sept 2008
- Haack S (1993) *Evidence and inquiry*. Blackwell, Oxford (Expanded edition: Amherst NY: Prometheus Books)
- Haack S (2003) *Defending science: within reason*. Prometheus, New York
- Hammersley M (1992) *What's wrong with ethnography?* Routledge, London
- Hammersley M (1998a) Telling tales about educational research: a response to John K. Smith. *Educational Res* 27(7):18–21
- Hammersley M (1998b) Get real! A defence of realism. In: Hodkinson P (ed) *The nature of educational research: realism, relativism, or post-modernism?* Crewe: crewe methodology series 1, Manchester Metropolitan University. Reprinted in Piper H, Stronach I (eds) *Educational research: difference and diversity*. Ashgate, Aldershot, pp 59–78
- Hammersley M (2007) *Methodological paradigms in educational research*. TLRP, London. Available at: <http://www.tlrp.org/capacity/rm/wt/hammersley/>. Accessed 10 Sept 2008
- Hammersley M (2008) Assessing validity in social research. In: Alasuutari P, Bickman L, Brannen J (eds) *The Sage handbook of social research methods*. Sage, London, pp 42–53
- Hammersley M (2009a) Challenging relativism: the problem of assessment criteria. *Qual Inq* 15(1):3–29
- Hammersley M (2009b) Closing down the conversation? A reply to Smith and Hodkinson. *Qual Inq* 15(1):40–48
- Hollinger DA (1997) James, Clifford and the scientific conscience. In: Putnam RA (ed) *The Cambridge companion to William James*. Cambridge University Press, Cambridge, pp 69–83
- Smith JK (2013) Quality in educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 375–385
- Smith JK, Hodkinson P (2009) Challenging neorealism: a response to Hammersley. *Qual Inq* 15(1):30–39

Gert Biesta

Abstract

In this chapter I provide a critical review of the suggestion that education should be turned into an evidence-based or evidence-informed profession and that educational research therefore focus on generating knowledge about ‘what works.’ I focus on three aspects of the discussion: the notion of educational practice, views about knowledge, and the ways in which research can be of practical use; in order to identify key ideas and assumptions and submit them to critical scrutiny. In all three cases I identify a tendency that the outcomes of a particular kind of educational research replace professional and democratic judgement. I provide an alternative way of understanding educational practice, educational knowledge and its practical use that places judgement back at the centre of educational considerations.

Keywords

Educational research • Evidence-based practice • Educational practice • Pragmatism • Practical roles of research

Introduction

The idea that education should be or become an evidence-based practice and that teaching should be or become an evidence-based profession has recently come to prominence in several countries around the world (see, for example, Davies 1999; Atkinson 2000; Oakley 2002; Slavin 2002; Feuer et al. 2002; Simons et al. 2003; Cutspec 2004; Thomas and Pring 2004). In Britain the push for evidence-based education partly came in the wake of critical reports about educational research which were commissioned by the Department for Education and Employment (the Hillage Report 1998) and the Office for Standards in Education (Ofsted) (Tooley and Darby 1998). These reports vented serious doubts about the quality and relevance of educational research, arguing, among other things, that educational research did not provide answers to the questions the

government asks in order to develop educational policy, that it did not provide educational professionals with clear guidance for their work, that it was fragmented, non-cumulative and methodologically flawed, and that it often was tendentious and politically motivated (see Pring 2000, p. 1).

Questions about the quality and relevance of educational research were not only raised by policy makers and educational practitioners, but also came from within the educational research community itself. On the one hand it was argued that *educational research* should not be left to educational researchers, but should be subject to centralized agenda-setting, both with respect to its contents and its methods, so that it can become more practically relevant. On the other hand it was suggested that *educational practice* should not be left to the opinions of educators, but that their work should be based on research evidence. The call for a *double transformation* of both educational research and educational practice lies at the very heart of the idea of evidence-based education (see Davies 1999, p. 109; Fox 2003, p. 93).

In Britain the call for the transformation of educational research and practice has led to a range of initiatives aimed at narrowing the gap between research, policy and practice.

G. Biesta (✉)
Faculty of Language and Literature, Humanities, Arts and Education,
University of Luxembourg, Luxembourg, UK
e-mail: gert.biesta@uni.lu

Amongst these are attempts to synthesize the findings of educational research through the conduct of systematic research reviews and attempts to make the outcomes of research more readily available to different educational constituencies. It also includes attempts to centrally set the agenda for educational research, both with respect to its contents and its methodology. With respect to the latter there is a strong push for experimental research which, according to proponents of evidence-based education, is the only method that is able to provide secure evidenced about ‘what works’ (see Hargreaves 1999; Oakley 2002; see also Cutspec 2004, pp. 1–2).

While similar concerns about the quality and impact of educational research have been raised in the United States, the implications of these discussions have been far more dramatic than in Britain and have, according to some, radically changed the landscape of educational research (see, for example, Eisenhart and Towne 2003). Although the idea that research in education should be able to tell us ‘what works’ was already articulated in the 1980s (Bennett 1986), it was not until the late 1990s that this way of thinking began to have an impact on legislation about federal research funding. Since the re-authorization in 2001 of the Elementary and Secondary Education Act (No Child Left Behind), the ‘gold standard’ of randomized controlled field trials seems to have become the preferred—if not prescribed—methodology for educational research (see Slavin 2002, p. 15; Cutspec 2004, p. 5). Although there is some indication of the emergence of a broader and more encompassing definition of what counts as scientific research in education (see NRC 2002; Feuer et al. 2002; Erickson and Gutierrez 2002), the call for causal analysis by means of experimental research in order to find out ‘what works’ remains dominant (see Slavin 2002, 2004; Mosteller and Boruch 2002).

The case for evidence-based practice in education has generated much discussion on both sides of the Atlantic. Proponents of evidence-based education stress that it is about time that educational research starts to follow the pattern that has created “the kind of progressive, systematic improvement over time that has characterized successful parts of our economy and society throughout the twentieth century, in fields such as medicine, agriculture, transportation, and technology” (Slavin 2002, p. 16). They suggest that the “most important reason for the extraordinary advances in medicine, agriculture, and other fields is the acceptance by practitioners of evidence as the basis for practice,” and particularly the randomized controlled trial which can establish “beyond reasonable doubt the effectiveness (or lack thereof) of treatments intended for applied use” (ibid.).

Opponents of the idea of evidence-based education have raised many questions about the appropriateness of the evidence-based approach for the field of education. Some have questioned the homology between education and medicine (e.g., Davies 1999; Pirrie 2001; Simons et al. 2003) and

have pointed to the different meanings of evidence in these fields (Nutley et al. 2003). Others have questioned the positivistic assumptions underlying the idea of evidence-based education and have criticized the narrow conception of research entailed in evidence-based education (for example, Atkinson 2000; Elliott 2001; Berliner 2002; St. Pierre 2002; Erickson and Gutierrez 2002; Oliver and Conole 2003). Still others have criticized the managerial agenda of evidence-based education and its linear, top-down approach to educational improvement (for example, Brighton 2000; Hammersley 2000; Ridgway et al. 2000; Davies 2003; Fox 2003; Olson 2004), and the lack of an acknowledgement of the crucial role of values in educational research and practice (for example, Davies 1999; Burton and Underwood 2000; Hammersley 2000; Elliott 2001; Willinsky 2001; Sanderson 2003; Oliver and Conole 2003).

In this chapter I wish to take a critical look at the idea of evidence-based practice and the ways in which it has been promoted and implemented in the field of education. Although I do believe that there is scope for improvement of the ways in which educational research and educational practice communicate and interact—an issue that has been central ever since education became an academic discipline (see, for example, Lagemann 2000)—I am not convinced that evidence-based practice as it is currently being presented and promoted provides the most appropriate matrix for addressing this issue. I am particularly concerned about the tension between scientific and democratic control over educational practice and educational research. On the research side evidence-based education seems to favor a technocratic model in which it is assumed that the only relevant research questions are questions about the effectiveness of educational means and techniques, forgetting, among other things, that what counts as ‘effective’ crucially depends on judgments about what is educationally desirable (see Biesta 2009a). On the practice side evidence-based education seems to seriously limit the opportunities for educational practitioners to make such judgments in a way that is sensitive to and relevant for their own contextualized settings. The focus on ‘what works’ makes it difficult if not impossible to ask the question what it should work *for* and who should have a say in determining the latter. To develop my argument I will examine three key-assumptions of evidence-based education. I will first ask to what extent the practice of education can be compared to the practice of medicine, the field in which the idea of evidence-based practice was first developed. I will then look at how we should understand the role of (research) knowledge in professional action, with special attention to the question as to what kind of epistemology would be appropriate for professional practices that wish to be informed by the outcomes of research. Thirdly, I will look at the expectations about the practical role of research that are implied in the idea of evidence-based education.

Professional Action in Education

The idea of evidence-based practice has its origins in the field of medicine. It was initially developed to teach medical students, but evidence-based medicine rapidly became the main paradigm in clinical practice and clinical decision making. In addition to the spread of evidence-based practice from medicine to most other health fields, it has also been advocated and adopted in more distant fields of professional activity, such as social work, probation, human resource management and, last but not least, education (see Sackett et al. 1996, 1997; Davies et al. 2000). Although evidence-based practice may at first sight seem to provide an attractive framework for bringing research and professional practice more closely together, there is a real question as to whether it offers a *neutral* framework which can simply be applied to any field of professional activity, or whether it is a framework which brings with it a particular view of professional practice (see Hammersley 2001; Elliott 2001). If the latter is the case—and I will argue below that it is—the question that needs to be asked is whether this framework is appropriate for the field of education.

Central to evidence-based practice is the idea of *effective intervention* (see, for example, Evans and Benefield 2001, p. 528; Oakley 2002, p. 278; Slavin 2002, p. 16, p. 18; Hoagwood and Johnson 2003, pp. 5–8). Evidence-based practice conceives of professional action as intervention, and asks from research that it provides evidence about the effectiveness of interventions. Research needs to find out, in other words, “what works” and the main, if not only way of doing this, so it is often argued, is through experimental research, most notably in the form of randomized controlled trials.

The idea of professional action as effective intervention indicates that evidence-based practice relies upon a *causal model of professional action* (see Burton and Chapman 2004, p. 60; Sanderson 2003, pp. 335–338). It is based on the idea that professionals do something—they administer a treatment, they intervene in a particular situation—in order to bring about certain effects. Effective interventions are those in which there is a secure relationship between the intervention (as cause) and its outcomes or results (as effects). It is important to note in this regard that ‘effectiveness’ is an *instrumental* value: it refers to the quality of processes, but does not say anything about what an intervention is supposed to bring about. This means, among other things, that it is meaningless to talk about effective teaching or effective schooling; the question that always needs to be asked is “Effective for what?” Also, evidence-based practice appears to rely on a separation between the means and ends of professional action (see Elliott 2001, p. 558 and 560). Evidence-based practice assumes that the

ends of professional action are given, and that the only relevant (professional and research) questions to be asked are about the most effective and efficient ways of achieving those ends. In this respect, evidence-based practice entails a *technological model of professional action*.

While both assumptions may be valid in the field of medicine—although I do think that they are only valid in relation to a very particular and rather narrow conception of health—I do not think that they can easily be transposed to the field of education. To begin with the role of causality: apart from the obvious fact that the condition of being a student is quite different from that of being a patient—being a student is not an illness just as teaching is not a cure—the most important argument against the idea that education is a causal process, lies in the fact that education is not a process of physical interaction but a process of *symbolic* or *symbolically mediated* interaction (see Burton and Chapman 2004, p. 59; Hammersley 1997; Olson 2004). If teaching is to have any effect on learning, it is because of the fact that students interpret and try to make sense of what they are being taught. It is only through processes of (mutual) interpretation that education is possible (see Biesta 1994a, b; Vanderstraeten and Biesta 2001). Despite the attempts of many to transform education into a causal technology (often based on the idea that we only need more research in order to find and ultimately control all the factors that determine learning), the simple fact that education is not a process of ‘push and pull’—or in the language of systems theory: that education is an open and recursive system—shows that it is the very impossibility of an educational technology which makes education possible (see also Biesta 2001a, 2004a). While we may want to refer to the activities of teachers as interventions—and one could argue that teaching always intervenes in some way or another in an existing course of events—we should not think of these interventions as causes, but as opportunities for students to respond and, through their response, to learn something from these opportunities (see Burton and Chapman 2004, pp. 60–61; Biesta 2001b).

This brings me to the second assumption about professional action implied in evidence-based practice: the idea that education can be understood as a technological process in which there is a clear separation between means and ends, and in which it is assumed that the ends are given and the only relevant (professional and research) questions to ask, are about the most effective and efficient way of achieving these ends. There are two problems with applying this line of thinking to education. The first is that even if we would be able to find the most effective way of achieving a particular end, we may still decide not to act accordingly. There is a substantial amount of research evidence which suggests that the most influential factor in school success is the home environment, and more importantly the experiences in the

first years of children's lives. This would suggest that the most effective way to achieve success in education would be to take children away from their parents at an early age and put them in an 'ideal' environment. Although there are quite a lot of strategies which try to intervene in the home environment, most societies find it undesirable to choose the most effective road towards educational achievement. This shows that knowledge about the effectiveness of interventions is not as such a sufficient basis for decisions about educational action. There is always the question as to whether particular interventions are *desirable* (see also Sanderson 2003).

In the case of education, and this is my second point, we not only need to ask whether our educational activities, strategies and—if one wishes to use the word—interventions are desirable as such; we also always need to ask what the educational impact of our actions is. We may well have conclusive empirical evidence that in all cases physical punishment is the most effective way of deterring or controlling disruptive behavior. Yet, as Carr (1992, p. 249) argues, "the practice should nevertheless be avoided because it teaches children that it is appropriate or permissible in the last resort to enforce one's will or get one's own way by the exercise of violence." The point here is that in education means and ends are not linked in a technological or external way, but are related *internally* or *constitutively* (see *ibid.*) The means we use in education are not neutral with regards to the ends we wish to achieve, It is not that in education we can simply use any means as long as they are 'effective.' The means we use "contribute qualitatively to the very character . . . of the goals which they produce" (*ibid.*). This is why education is at heart a moral practice more than a technological enterprise (see *ibid.*, p. 248; see also Elliott 2001).

These considerations suggest that the model of professional action implied in evidence-based practice—i.e., the idea of education as a treatment or intervention that is a causal means to bring about particular, pre-given ends—is not appropriate for the field of education. What is needed for education is a model of professional action which is able to acknowledge the non-causal nature of educational interaction and the fact that the means and ends of education are internally rather than externally related. What is needed, in other words, is an acknowledgement of the fact that education is a moral practice, rather than a technical or technological one—a distinction which goes back to Aristotle's distinction between *phronesis* (practical wisdom) and *techne* (instrumental knowledge) (see Aristotle 1980, particularly Book VI; see also Biesta 2009b). The most important question for educational professionals is therefore *not* about the effectiveness of their actions but about the potential educational value of what they do, i.e., about the educational desirability of the opportunities for learning that follow

from their actions. This is why the "what works" agenda of evidence-based practice is at least insufficient and probably misplaced in the case of education, because judgment in education is not simply about what is possible (a factual judgment) but about what is educationally desirable (a value judgment). As Sanderson (2003) concludes: "(t)he question for teachers is not simply 'what is effective' but rather, more broadly it is, 'what is appropriate for these children in these circumstances'" (*ibid.*). To suggest that research about 'what works' can replace normative professional judgment is not only to make an unwarranted leap from 'is' to 'ought.' It is also to deny educational practitioners the right *not* to act according to evidence about 'what works' if they judge that such a line of action would be educationally undesirable (see also Burton and Chapman 2004).

Professional Judgment and Practical Epistemology

The conclusion that professional judgment is central to educational practice, and that the nature of this judgment is moral rather than technical, does not imply that professional judgment in education may *not* be informed by the outcomes of educational research. The second issue that I want to explore, therefore, is how we should understand the way in which research outcomes may impact upon educational practice. For this we need to turn to epistemological questions (and it is remarkable to see that little attention has been paid to this dimension in the discussion so far; for some exceptions, see Berliner 2002; Sanderson 2003; Eraut 2003; Burton and Chapman 2004). The main question here is what kind of epistemology might be appropriate for an adequate understanding of the role of knowledge in (professional) action. To develop an answer to this question I will take a closer look at the work of John Dewey who, in my view, has developed one of the most powerful and sophisticated 'practical epistemologies' available in Western philosophy (see Biesta and Burbules 2003).

Although there may be different views about how research can and should be used in educational practice, there seems to be an almost unanimous expectation that research *can* tell us "what works," that it can provide "sound evidence" about the likely effects of policy and practice, and "sound evidence of effectiveness" more generally. Whether these expectations are warranted, ultimately depends on the epistemological assumptions one brings to the understanding of what research can achieve. It is here that Dewey's ideas are relevant, both with respect to what we can expect from research and with respect to the question how research can be used in educational practice.

The most important aspect of Dewey's theory of knowing lies in the fact that it is *not* premised on the dualism between immaterial mind and material world—a dualism which has been the framework for modern epistemology at least since the time when Descartes divided reality into *res cogitans* (the knowing 'stuff') and *res extensa* (the 'stuff' that occupies space). Dewey offers a theory of knowing that does *not* start with the impossible question as to how "a knower who is purely individual or 'subjective' and whose being is wholly psychical and immaterial . . . and a world to be known which is purely universal or 'objective' and whose being is wholly mechanical and physical" can ever reach each other (Dewey 1911, p. 441). Instead, he approaches the question of knowledge from within an action-theoretical framework, one in which knowing is understood as "a way of doing"—which is why we may want to refer to Dewey's position as a theory of *knowing* and not a theory of *knowledge* (see Biesta 2004b).

The central concept in Dewey's theory of knowing is the notion of *experience*. Experience is not about consciousness or mental awareness but refers to the transactions of living organisms and their environments. Dewey's transactional understanding of experience provides a framework in which knowing is no longer about an immaterial mind looking at the material world and registering what goes on in it—a view to which Dewey refers as the *spectator theory of knowledge*. For Dewey, knowing is not about a world 'out there,' but concerns the *relationship* between our actions and their consequences—which is the central idea of Dewey's *transactional theory of knowing* (see Biesta 2004b).

Because knowing is about grasping and understanding the relationship between our actions and their consequences, knowing can help us to gain better control over our actions—better at least, that is, than in the case of blind trial and error. "Where there is the possibility of control," Dewey writes, "knowledge is the sole agency of its realization" (Dewey 1925, p. 29). It is important to see that 'control' here does not mean complete mastery, but the ability to intelligently plan and direct our actions.

The main reason why Dewey's transactional theory of knowing is important for our discussion is that it provides us with a framework for understanding the role knowledge plays in action. To understand Dewey's approach, it is first of all important to see that we do not need to have any knowledge at all in order to act. It is not that we need to have information about 'the world' before we can act in it. As living organisms, we simply are always already active, we simply are always already in transaction with our environment. This does not mean, of course, that we do not learn as a result of our transactions with the world. The whole idea of experience is precisely that we undergo the consequences of our 'doings' and that we change as a result of this. Dewey explains that experience results in "change in the organic

structures that conditions further behavior" (Dewey 1938, p. 38). He refers to such changes as *habits*. Habits are not patterns of action, but predispositions to act.

We basically acquire our habits through processes of trial and error—or, in more theoretical language: through experimentation. In a very fundamental sense, experimentation is the only way in which we can learn anything at all: we learn because we do and subsequently undergo the consequences of our doings. Yet for Dewey there is a crucial difference between blind trial and error—experimentation without deliberation and direction—and what he calls *intelligent* action. The difference between the two has to do with the intervention of thinking or reflection, that is, with the use of symbolic operations.

To understand Dewey's ideas about the role of thinking in action, it is important to see that we only learn and acquire new habits in those situations in which the organism-environment transaction is interrupted. One way to find an adequate response in such situations is through trial and error. Sometimes this will be successful; sometimes it will not. Apart from the fact that trial and error may not be a very efficient way of problem solving, there is also the risk that some attempts to solve the problem may be irreversible which means that if those attempts do not solve the problem we may not be able to solve the problem at all. The way out of this predicament, according to Dewey, is through experimentation with different lines of action at a symbolic level, rather than through overt action. This is precisely what thinking does: it is the "dramatic rehearsal (in imagination) of various competing possible lines of action" (Dewey 1922, p. 132). The choice for a specific line of action should be understood as "hitting in imagination upon an object which furnishes an adequate stimulus to the recovery of overt action" (Dewey 1922, p. 134). Whether this choice will actually lead to coordinated transaction—whether the problem will be solved—will, of course, only become clear when we actually act. Thinking, deliberation cannot solve problems, nor can it guarantee that the chosen response will be successful. But what it can do is making the process of choosing more intelligent than it would have been in the case of blind trial and error.

It is because of the fact that our experimental problem solving is embedded in symbolic operations, in thinking and deliberation, in language, stories, theories, hypotheses, explanations, etcetera, that we not only learn at the level of our habits. We also add to our 'symbolic resources' for addressing future problems. We could say that we have gained knowledge, as long as we do not forget that this is not knowledge about 'the world' but about the *relationships* between our actions and their consequences in this particular situation. After all, according to Dewey's transactional framework this is the one and only way in which the world will ever 'appear' to us.

The foregoing account of reflective experimental problem solving—a process to which Dewey refers as *inquiry* (Dewey 1938)—is the matrix for Dewey’s account of the *acquisition* of knowledge. One of the main implications of this view is that inquiry—or research—does not provide us with information about a world ‘out there,’ but only with information about *possible relationships between actions and consequences*. In the case of everyday problem solving we learn about possible relationships between our actions and their consequences. In the case of randomized controlled trials we learn about possible relationships between experimental treatments and measured results. In neither case, however, does this result in truths about a world ‘out there.’ It rather gives us ‘warranted assertions’ about relationships between what we did and what followed from it. This means that inquiry and research can only tell us what is possible—or to be even more precise: they can only show us what *has been* possible. Research, in short, can tell us *what worked*, but cannot tell us *what works*.

Dewey’s account of the process of inquiry is however not only an account of how we acquire knowledge. It is at the very same time an account of how we solve problems. From the latter point of view, Dewey’s account also provides us with a model of professional action and, more importantly, with a view about the role of knowledge in action. There are three things that are important in Dewey’s account. First of all, for Dewey professional action is not about following tried and tested recipes, but about addressing concrete and, in a sense, always unique problems. Dewey’s transactional view implies that although there is structure, form and duration in our transactions with the world, we cannot and should not expect that situations will stay the same over time, and we should definitely not expect so in the social realm.

Secondly, it is important to see that knowledge acquired in previous situations—or knowledge acquired by others in other inquiry or research situations—does not enter the process of reflective problem solving in the form of a rule or prescription. When Dewey writes that “(n)o conclusion of scientific research can be converted into an immediate rule of educational art” (Dewey 1929, p. 9), this is not only because all that research can give us is an understanding of possibilities—of what worked, not what will work. It is also because in reflective problem solving we do not use ‘old’ knowledge to simply tell us what we should do. We use ‘old’ knowledge to guide us in our attempts to understand what the problem might be and in guiding us in the intelligent selection of possible lines of action. What ‘old’ knowledge does, in other words, is help us in making our problem solving more intelligent. Yet, the proof of the pudding always lies in the action that follows. This will ‘verify’ both the adequacy of our understanding of the problem and, in one and the same process, the adequacy of the

proposed solution (for Dewey’s views on verification see Biesta and Burbules 2003, pp. 68–71).

This may seem to suggest—and this is my third point—that Dewey would not object to a technological view of professional action as long, that is, as we do not expect too much or the wrong thing from research and as long as we keep in mind that professional judgment is always about situations that in some respect are unique. But for Dewey, problem solving is not simply about finding the right means for achieving a particular end. For Dewey intelligent problem solving should include both means and ends. It is not only that we need to judge “existential materials” with respect to their function “as material means of effecting a resolved situation” (Dewey 1938, p. 490). At the very same time and in one and the same process we need to evaluate ends “on the basis of the available means by which they can be attained” (ibid.). The point of the process of inquiry is to institute “means-consequences (ends) in *strict conjugate relation* to each other” (ibid.).

The upshot of this is that neither in our role as researcher nor in our role as professional educator should we accept given problem definitions and given, pre-determined ends. Dewey makes a strong case for arguing that both in research and professional practice any ends are of the nature of a hypothesis, and that such hypotheses have to be formed, developed and tested “in strict correlation with existential conditions as means” (ibid.). Similarly, we should approach given definitions of a problem as hypotheses that may alter as a result of the inquiry process. Dewey argues, in other words, that we should not only be experimental with respect to means, but also with respect to ends and the interpretation of the problems we address. It is only along these lines that inquiry in the social domain can help us to find out not only whether what we desire is achievable, but also whether achieving it is desirable. Dewey’s ‘pragmatic technology’ (Hickman 1990) is therefore not about social engineering or social control in the narrow sense of the word. Action in the social domain can only become intelligent action when its intrinsic relationship with human purposes and consequences, that is, when the political nature of inquiry in the social domain, is fully taken into account.

Dewey’s practical epistemology thus provides us with an important alternative for the model of evidence based education. There are two crucial differences. First of all, Dewey shows that ‘evidence’ does not provide us with rules for action but only with hypotheses for intelligent problem solving. If, to put it differently, we want an epistemology that is practical enough to understand how knowledge can support practice, we have to concede that the knowledge available through research is not about what works and will work, but about what has worked in the past. The only way to utilize this knowledge is as an *instrument* in intelligent professional action. The second difference between Dewey’s

approach and traditional views of evidence-based practice is that neither research nor professional action can and should only focus on the most effective means to bring about pre-determined ends. Researchers and practitioners should also engage in inquiry about ends, and this in close relation to the inquiry into means. Systematic inquiry into what is desirable is not only a task for educational researchers and educational practitioners but, in the case of education, extends to society at large. A democratic society is precisely one in which the purpose of education is not given but is a constant topic for discussion and deliberation. As I have argued elsewhere, the current political climate in many Western countries has made it increasingly difficult to have a democratic discussion about the purposes of education (see Biesta 2004c, d).

The Practical Roles of Educational Research

The idea behind the ‘what works’ slogan is that research should provide information about effective strategies for educational action. I have already shown that educational practice is more than the simple application of strategies or techniques to bring about predetermined ends. I have also already shown, with Dewey, that research can only indicate what *has worked*, not what works or will work, which means that the outcomes of research cannot simply be translated into rules for action. Knowledge about the relationship between actions and consequences can only be used to make professional problem solving more intelligent. While I have argued that research should not only investigate the effectiveness of educational means but should at the same time inquire into the desirability of educational ends, evidence-based practice only focuses on the first task and, in doing so, assumes that the only way in which research can be relevant for educational practice is through the provision of instrumental or technical knowledge.

In his discussion of the ways in which social science research can be of practical relevance, de Vries (1990) refers to this particular way in which research can inform social practice as the *technical role* of research. In the technical role research is a producer of means, strategies and techniques to achieve given ends. De Vries argues, however, that there is at least one other way in which research can inform practice. This is by providing different *interpretations*, different way of understanding and imagining social reality. He refers to the latter as the *cultural role* of research.

De Vries’s distinction allows us to see that the provision of instrumental knowledge is not the only way in which educational research can inform and be beneficial for educational practice. While there is an important task for educational research in finding, testing and evaluating different

ways of educational action, research can also have impact when it helps educational practitioners to acquire a different understanding of their practice, if it helps them to see and imagine their practice differently. To see a classroom through the lens of behavioral objectives or through the lens of legitimate peripheral participation can make a huge difference. The difference it makes is not only that we can see things differently. By looking through a different theoretical lens, we may also be able to understand problems that we did not understand before, or even see problems where we did not see them before (think, for example, of the ways in which feminist scholarship has helped us precisely to make problems visible). As a result, we may be able to envisage opportunities for action where we did not envisage them before. The cultural role of educational research is thus no less practical than the technical role. A key problem with the idea of evidence-based practice is that it simply overlooks the cultural option. It focuses on the production of means for given ends and reduces research questions “to the pragmatics of technical efficiency and effectiveness” (Evans and Benefield 2001, p. 539). It only has technological expectation about research.

There are two further aspects of de Vries’s distinction between the technical and the cultural role that are important for our discussion. The first is that although the two roles can be distinguished from each other, this does not mean that they should necessarily be thought of as separate. On the one hand de Vries shows that different interpretations often help us to see new problems and new possibilities for action and therefore can lead to different and/or more precise ‘technical’ questions for further research. On the other hand: if research is successful in performing its technical role, if, in other words, research does bring about strategies and approaches that successfully solve problems, this may well convince us to see and understand the situation in terms of the framework that informs this particular approach. More often than not, therefore, the technical and the cultural approach mutually inform and reinforce each other.

The foregoing may suggest that the technical and the cultural role are two options available to researchers to choose from. This, however, may not always be the case. De Vries argues that the role that educational research can play depends to a large extent upon the micro- and macro-political conditions under which researchers operate. In those cases in which there is a strong consensus about the aims of education or, to put it differently, where the aims of education cannot be questioned, the only ‘possible’ role for research seems to be a technical role. When, on the other hand, such a consensus does not exist, there is a possibility for research to play a cultural role by providing different interpretations of the situation. De Vries connects this analysis with the idea of democracy. He suggests that a democratic society is a society in which social research is not

restricted to a technical role, but can also perform a cultural role. A democratic society is, in other words, characterized by the existence of an open and informed discussion about problem definitions and the aims and ends of our educational endeavors. The fact that the whole discussion about evidence-based practice only seems to have technical expectations about the practical role of research, is therefore also a worrying sign from the point of view of democracy.

Discussion

In this chapter I have examined three key assumptions which underlie the idea of evidence-based education. In discussing the model of professional action that is implied in the idea of evidence-based education I have argued that education cannot be understood as an intervention or treatment because of the non-causal and normative nature of educational practice and because of the fact that the means and ends in education are internally related. This implies that educational professionals need to make judgments about what is educationally desirable. Such judgments are by their very nature *normative* judgments. To suggest that research about ‘what works’ can replace such judgments not only implies an unwarranted leap from ‘is’ to ‘ought’ but also denies educational practitioners the right *not* to act according to evidence about ‘what works’ if they judge that such a line of action would be educationally undesirable. The problem with evidence-based education is therefore not only that it is not sufficiently aware of the role of norms and values in educational decision making (see, for example, Elliott 2001; Simons et al. 2003). The problem is that it also limits the opportunities for educational professionals to exert their judgment about what is educationally desirable in particular situations.

A similar issue became clear in the discussion about the epistemological assumptions of evidence-based practice. Using Dewey’s practical epistemology I showed that research cannot supply us with rules for action, but only with hypotheses for intelligent problem solving. Research can only tell us what has worked in a particular situation, not what will work in any future situation. The role of the educational professional in this is not to translate general rules into particular lines of action. It rather is to utilize research findings to make their problem solving more intelligent. This not only involves deliberation and judgment about the means and techniques of education; it involves at the very same time deliberation and judgment about the ends of education. Dewey’s practical epistemology therefore challenges the idea of evidence-based education in two ways: it challenges the way in which evidence-based education thinks about what research can achieve in relation to educational practice, and it challenges the technocratic

model in which it is assumed that the discussion can and should be restrained to technical questions about ‘what works.’ Dewey helps us to see that normative questions are serious research questions in their own right; questions, moreover, that need to be part of a full, free and open normative debate among all those with a stake in education (which not only includes those with a direct interest in education, but should include all citizens).

The idea that the link between research, policy and practice is not restricted to technical questions, but can also be established through the ways in which research can provide different understandings of educational reality and different ways of imagining a possible future, was central in the third step of my discussion, in which I looked at the way in which evidence-based education conceives of the relationship between research, policy and practice. I not only suggested that evidence-based education seems to be unaware that research can play both a technical and a cultural role, and that both can have very real and practical consequences. I also showed that the extent to which research can perform a technical and/or a cultural role can be taken as an indication of the democratic quality of a society. This is why the current climate in which governments and policy makers seem to demand that educational research only plays a technical role, can and should indeed be read as a threat to democracy itself (see Hammersley 2001, p. 550).

It is for all these reasons that there is a real need to widen the scope of our thinking about the relationship between research, policy and practice, so as to make sure that the discussion is not restricted to finding the most effective ways to achieve certain ends, but also addresses questions about the desirability of the ends themselves. With Dewey I wish to emphasize that we always need to ask the question whether our ends are desirable given the way in which we might be able to achieve them. In education, the further question that always needs to be asked is about the educational quality of our means, that is, about what students will learn from our use of particular means or strategies. From this perspective it is problematic that the discussion about evidence-based practice is only focused on technical questions—questions about ‘what works’—while forgetting the need for critical inquiry into normative and political questions about what is educationally desirable. If we really want to improve the relationship between research, policy and practice in education, we need an approach in which technical questions about education can be addressed in close connection with normative, educational and political questions about what is educationally desirable. The extent to which a government not only allows the research field to raise this set of questions, but actively supports and promotes research and researchers to go beyond simplistic questions about ‘what works,’ may well be an indication of the degree in which a

society can be called a democratic society. From the point of view of democracy, an exclusive emphasis on ‘what works’ will therefore simply not work.

Acknowledgement Portions of this chapter have been adapted from Gert J. J. Biesta, “Why ‘What Works’ Won’t Work: Evidence-Based Practice and the Democratic Deficit of Educational Research,” *Educational Theory* 57(1), 1–22. Adapted by permission of the University of Illinois.

Note on Contributor

Gert Biesta is Professor of Educational Theory and Policy at the University of Luxembourg, and Visiting Professor for Education and Democratic Citizenship at Mälardalen University, Sweden. He is editor-in-chief of *Studies in Philosophy and Education*. Recent books include: *Pragmatism and Educational Research* (with Nicholas C. Burbules; 2003); *Beyond Learning: Democratic Education for a Human Future* (2006); *Improving Learning Cultures in Further Education* (with David James, 2007); *Derrida, Deconstruction and the Politics of Pedagogy* (with Michael A. Peters, 2008); and *Good Education in an Age of Measurement: Ethics, Politics, Democracy* (2010). www.gertbiesta.com

References

- Aristotle (1980) *The Nicomachean ethics* (trans: Ross D, revised by: Ackrill JL, Urmson JO). Oxford University Press, Oxford
- Atkinson E (2000) In defence of ideas, or why ‘what works’ is not enough. *Brit J Sociol Educ* 21(3):317–330
- Bennett W (1986) *What works: research about teaching and learning*. U.S. Department of Education, Washington, DC
- Berliner DC (2002) Educational research: the hardest science of all. *Educ Res* 31(8):18–20
- Biesta GJJ (1994a) Education as practical intersubjectivity. Towards a critical-pragmatic understanding of education. *Educ Theory* 44(3):299–317
- Biesta GJJ (1994b) Pragmatism as a pedagogy of communicative action. *Stud Philos Educ* 13(3–4):273–290
- Biesta GJJ (2001a) How difficult should education be. *Educ Theory* 51(4):385–400
- Biesta GJJ (2001b) Responding: Levinas and moral education. In: Stone L (ed) *Philosophy of education 2000*. Philosophy of Education Society, Urbana-Champaign, pp 75–77
- Biesta GJJ (2004a) “Mind the gap!” Communication and the educational relation. In: Bingham C, Sidorkin AM (eds) *No education without relation*. Peter Lang, New York, pp 11–22
- Biesta GJJ (2004b) *Kunskapande som ett sätt att handla—John Deweys transaktionella teori om kunskapande*. [Knowing as a way of doing. John Dewey’s transactional theory of knowing.]. *Utbildning och Demokrati* 13:41–64
- Biesta GJJ (2004c) Against learning. Reclaiming a language for education in an age of learning. *Nordisk Pedagogik* 23:70–82
- Biesta GJJ (2004d) Education, accountability and the ethical demand. Can the democratic potential of accountability be regained? *Educ Theory* 54(3):233–250
- Biesta GJJ (2009a) Good education in an age of measurement. *Educ Assess Eval Account* 21(1):33–46
- Biesta GJJ (2009b) Values and ideals in teachers’ professional judgement. In: Gewirtz S, Mahony P, Hextall I, Cribb A (eds) *Changing teacher professionalism*. Routledge, London, pp 184–193
- Biesta GJJ, Burbules NC (2003) *Pragmatism and educational research*. Rowman and Littlefield, Lanham
- Brighton M (2000) Making our measurements count. *Eval Res Educ* 14(3–4):124–135
- Burton M, Chapman MJ (2004) Problems of evidence based practice in community based services. *J Learn Disabil* 8(1):56–70
- Burton JL, Underwood JC (2000) Evidence-based learning: a lack of evidence. *Med Teach* 22(2):136–140
- Carr D (1992) Practical enquiry, values and the problem of educational theory. *Oxford Rev Educ* 18(3):241–251
- Cutspec PA (2004) Bridging the research-to-practice gap: evidence-based education. *Centerscope: Evidence-Based Approaches to Early Childhood Development* 2(2):1–8
- Davies P (1999) What is evidence-based education? *Brit J Educ Stud* 47(2):108–121
- Davies B (2003) Death to critique and dissent? The policies and practices of new managerialism and of ‘evidence-based’ practice. *Gender Educ* 15(1):91–103
- Davies TO, Nutley SM, Smith PC (eds) (2000) *What works. Evidence-based policy and practice in the social services*. The Policy Press, Bristol
- de Vries GH (1990) *De ontwikkeling van wetenschap*. Wolters Noordhoff, Groningen
- Dewey J (1911) Epistemology. In: Boydston J (ed) *The middle works (1899–1924)*, vol 6. Southern Illinois University Press, Carbondale and Edwardsville, pp 440–442
- Dewey J (1922) Human nature and conduct. In: Boydston J (ed) *The middle works (1899–1924)*, vol 14. Southern Illinois University Press, Carbondale and Edwardsville
- Dewey J (1925) Experience and nature. In: Boydston J (ed) *The later works (1925–1953)*, vol 1. Southern Illinois University Press, Carbondale and Edwardsville
- Dewey J (1929) The sources of a science of education. In: Boydston J (ed) *The later works (1925–1953)*, vol 5. Southern Illinois University Press, Carbondale and Edwardsville, pp 218–235
- Dewey J (1938) Logic. The theory of inquiry. In: Boydston J (ed) *The later works (1925–1953)*, vol 12. Southern Illinois University Press, Carbondale and Edwardsville
- Eisenhart M, Towne L (2003) Contestation and change in national policy on ‘scientifically based’ education research. *Educ Res* 32(7):31–38
- Elliott J (2001) Making evidence-based practice educational. *Brit Educ Res J* 27(5):555–574
- Eraut M (2003) Practice based evidence. In: Thomas G, Pring R (eds) *Evidence-based policy and practice*. Open University Press, Milton Keynes, pp 88–100
- Erickson F, Gutierrez K (2002) Culture, rigor, and science in educational research. *Educ Res* 31(8):21–24
- Evans J, Benefield P (2001) Systematic reviews of educational research: does the medical model fit? *Brit Educ Res J* 27(5):527–541
- Feuer M, Towne L, Shavelson R (2002) Scientific culture and educational research. *Educ Res* 31(1):4–14
- Fox M (2003) Opening Pandora’s box: evidence-based practice for educational psychologists. *Educ Psychol Prac* 19(2):91–102
- Hammersley M (1997) Educational research and a response to David Hargreaves. *Brit Educ Res J* 23(2):141–161
- Hammersley M (2000) Some questions about evidence-based practice in education. Paper presented at the symposium on “evidence-based practice in education” at the annual conference of the British Educational Research Association, 13–15 Sept 2001. Retrieved from: <http://www.leeds.ac.uk/educol/documents/00001819.htm>. Accessed 18 Feb 2005

- Hammersley M (2001) On “systematic” reviews of research literatures: a “narrative” response to Evans & Benefield. *Brit Educ Res J* 27(5):543–554
- Hargreaves D (1999) Revitalising educational research: lessons from the past and proposals for the future. *Cambridge J Educ* 29(2):405–419
- Hickman L (1990) John Dewey’s pragmatic technology. Indiana University Press, Bloomington and Indianapolis
- Hillage Report (1998) Excellence in research on schools. Institute for Employment Studies, University of Sussex
- Hoagwood K, Johnson J (2003) School psychology: a public health framework: I. From evidence-based practices to evidence-based policies. *J Sch Psychol* 41(1):3–21
- Lagemann E (2000) An elusive science: the troubling history of educational research. University of Chicago Press, Chicago
- Mosteller F, Boruch R (eds) (2002) Evidence matters: randomized trials in education research. Brookings, Washington
- NRC (National Research Council) (2002) Scientific research in education. National Academy Press, Washington
- Nutley S, Davies H, Walter I (2003) Evidence based policy and practice: cross sector lessons from the UK. Keynote paper for the social policy research and evaluation conference, Wellington, 2–3 July. Retrieved from: www.st-andrews.ac.uk/~cprm/NZ%20conference%20paper%20final%20170602.pdf. Accessed 8 Mar 2005
- Oakley A (2002) Social science and evidence-based everything: the case of education. *Educ Rev* 54(3):277–286
- Oliver M, Conole G (2003) Evidence-based practice and e-learning in higher education: can we and should we? *Res Pap Educ* 18(4):385–397
- Olson D (2004) The triumph of hope over experience in the search for “what works”: a response to slavin. *Educ Res* 33(1):24–26
- Pirrie A (2001) Evidence-based practice in education: the best medicine? *Brit J Educ Stud* 49(2):124–136
- Pring R (2000) Philosophy of educational research. Continuum, London/New York
- Ridgway J, Zawojewski JS, Hoover MN (2000) Problematising evidence-based policy and practice. *Eval Res Educ* 14(3–4):181–192
- Sackett DL, Rosenberg W, Gray JM, Haynes RB, Richardson WS (1996) Evidence based medicine: what it is and what it isn’t. *Br Med J* 312:71–72
- Sackett DL, Richardson WS, Rosenberg WMC, Haynes RB (1997) Evidence-based medicine: how to practice and teach EBM? Churchill Livingstone, London
- Sanderson I (2003) Is it “what works” that matters? Evaluation and evidence based policy making. *Res Pap Educ Pol Prac* 18(4):331–347
- Simons H (2003) Evidence-based practice: panacea or over promise? *Res Pap Educ* 18(4):303–311
- Simons H, Kushner S, Jones K, James D (2003) From evidence-based practice to practice-based evidence: the idea of situated generalization. *Res Pap Educ Pol Prac* 18(4):347–365
- Slavin RE (2002) Evidence-based educational policies: transforming educational practice and research. *Educ Res* 31(7):15–21
- Slavin RE (2004) Education research can and must address “what works” questions. *Educ Res* 33(1):27–28
- St. Pierre EA (2002) ‘Science’ rejects postmodernism. *Educ Res* 31(8):25–27
- Thomas G, Pring R (eds) (2004) Evidence-based policy and practice. Open University Press, Milton Keynes
- Tooley J, Darby D (1998) Educational research: an OFSTED critique. OFSTED, London
- Vanderstraeten R, Biesta GJJ (2001) How is education possible? *Educ Philos Theory* 33(1):7–21
- Willinsky J (2001) Education and democracy: the missing link may be ours. *Harvard Educ Rev* 72(3):367–392

Philosophy Is Not Enough: Inserting Methodology and Politics into the Space Between Science and Democracy

53

Harry Torrance

Abstract

Calls for the development of evidence-based policy and practice in education raise many questions about the nature of evidence and the relationship between research, policy, practice, and the democratic process. The logic of proponents seems to be that the best evidence of ‘what works’ needs to be produced by research, and in particular by large scale quantitative and experimental approaches to research which, the critics have claimed, are not widely undertaken by educational researchers. Having been produced, such evidence should then be translated into policy; and practice must follow policy, in a classic centre-periphery, Research, Development, Dissemination (RDD) model of social and institutional change. Such a model privileges research evidence over the democratic process. However philosophical critiques of the logic and implications of the evidence movement are insufficient. Educational researchers must draw attention to its weaknesses in methodology, and seek to address the democratic deficit by linking research methods to stakeholder engagement.

Keywords

Evidence-based practice • Qualitative research and policy • Democratic evaluation • Stakeholder engagement • ‘What works’

Calls for the development of evidence-based policy and practice in education raise many questions about the nature of evidence and the relationship between research, policy, practice, and the democratic process. Such calls seem self-evidently reasonable – who would argue against the use of evidence? Who could argue in favour of superstition-based practice? Yet the use of evidence is not straightforward and policy-makers can cite ‘the evidence’ when it suits them, and ignore it, invoking other political exigencies, when it does not. Evidence-based practice also appeals to the rationality and self-interest of some sections of the research community, privileging research knowledge above what is often characterised as traditional, ineffective professional

practice. With respect to education, such calls ask ‘where is the secure research-derived knowledge-base of teachers and teaching?’ – simultaneously castigating the teaching profession for not having one, and the research community for not providing it (Hargreaves 1996; Slavin 2002). Comparisons are often made with medicine, which, it is claimed, does indeed have a well-proven knowledge base from which to select and apply treatments. Though within medicine itself, the debate is rather more complex and nuanced, especially when it comes to the interaction of treatments and patient decision-making – not all patients take their medicine (Barbour and Barbour 2003).

Calls for evidence-based policy and practice extend across the public services more generally. Likewise they are visible internationally. So such calls are not unique to education, nor do they simply derive from one set of national circumstances, though perhaps they are particularly located in the UK and USA at the present time

H. Torrance (✉)
Education and Social Research Institute, Manchester Metropolitan
University, Manchester, UK
e-mail: h.torrance@mmu.ac.uk

(cf. Mosteller and Boruch 2002, p. 2 for evidence of ‘evidence movement networking’ across the UK and USA). Nevertheless such calls have been particularly acute in education and seem to imply that education as field of public endeavour, albeit in common with other social services, needs to ‘grow up’ and modernise in order to meet its obligations to the populace as expressed through government policy. The logic of proponents seems to be that the best evidence of ‘what works’ needs to be produced by research, and in particular by large scale quantitative and experimental approaches to research which, the critics have claimed, is not widely undertaken by educational researchers. Having been produced, such evidence should then be translated into policy; and practice must follow policy, in a classic centre-periphery, Research, Development, Dissemination (RDD) model of social and institutional change (Hargreaves 1996; Slavin 2002; Mosteller and Boruch 2002). However, as noted above, the extent to which policy-makers really take on this logic, rather than deploy it when convenient, is debatable; to do so would, in effect, be to hand over their role as decision-makers to the research community.

Gert Biesta’s chapter addresses these issues head-on. His concern is for the place of educational decision-making in the democratic process. He argues that evidence-based practice treats education as an ‘intervention’ (in the lives of students) and as such invokes a causal and technological model of professional action, rather than a moral and interpretive model. Evidence-based practice takes the ends of education as given, and implies that research should only investigate the efficiency of the means to the ends (‘what works’). Moreover, there is an implication that teachers should then comply with the ‘best evidence’, rather than exercise any judgement about what may or may not be appropriate in certain circumstances. Thus research findings, applied via policy decisions, will extinguish professional judgement and democratic debate about the nature of education. But the means we employ in education are (at least partly) constitutive of the ends we seek to achieve. As educators, what we do and how we do it are as important as the content of what we are trying to communicate: the medium is deeply implicated in the message. Some means may be efficient but lead to undesirable ends, some ends may be desirable but extremely hard to achieve. Biesta argues that to serve effectiveness and the democratic process research should investigate ends as well as means, affording practitioners a critical perspective on both and the relationship between them.

Furthermore Biesta invokes Dewey to posit a transactional theory of professional knowledge. That is, in the symbolic and interpretive world of education, as dependent on emergent identity and motivation as it is on curriculum and teaching methods, research cannot provide a definitive knowledge base from which to act. Rather, what it can

produce is a set of ‘symbolic resources’ or ‘hypotheses for intelligent problem-solving’ through which teachers can exercise judgement as to what might work – what is appropriate to try with a particular group of students in a particular set of circumstances. Finally Biesta argues that research has a social or cultural role as well as an empirical or technical role – it allows us to see things differently, as well as more clearly – and as such should contribute to democratic debates about the meaning of what it is to be educated. In this it should serve the wider interests of the populace, not just the policy interests of the powerful, or indeed the particular interests of professional educators.

I find myself in broad agreement with Biesta, though with some comments and queries. Thus for example his response to the critiques which led to calls for evidence-based practice, seems to imply an acceptance of the original criticisms, with just the response being mistaken, rather than the criticism. Yet many rejoinders have been published (e.g. Hammersley 1997, 2001, 2005; MacLure 2003, 2005); and, perhaps more significantly, the empirical basis for the criticisms have been demonstrated to be false, certainly in the UK where such criticisms were first articulated (Hargreaves 1996; Tooley and Darby 1998). Analyses of papers published in the *British Educational Research Journal*, the leading UK journal of the British Educational Research Association, and of educational research projects funded by the UK Economic and Social Research Council (ESRC), demonstrate that critics misrepresented the field: a wide range of methods were and are employed in British educational research including large scale quantitative analysis, experimental design, and mixed methods (Gorard with Taylor 2004; Torrance 2008). So a key question must be why has the evidence-based practice movement gained such momentum, despite the evidence, rather than because of it. With respect to the research community itself, there are issues here of the political economy of research – who gets funded and for what? – and how different elements of the research community position themselves in relation to government and sponsors (cf. Baez and Boyles 2009; Greenberg 2001; Torrance 2011). With respect to the relationship of research to policy, we might also note the felt need for policymakers to take a more direct role in disciplining the research community and setting the research agenda (cf. Blunkett 2000). Biesta raises the issue of the threat to democratic debate rather obliquely, as part of a philosophical reflection on the nature of knowledge in professional action. Important as this is, and I will return to it below, the threat has been, and is, articulated very directly by neo-liberal governments around the world, through straightforward interventions in research funding decisions (e.g. NCLB 2001; DBIS 2009).

This issue also raises some interesting questions as to whether or not it is appropriate and effective to respond to

methodological imperatives in philosophical terms. Thus for example, one element of the evidence-based movement's argument, and of the US government's framing of funding decisions, is to privilege large scale quantitative methods and particularly randomised controlled trials (RCTs) (Mosteller and Boruch 2002; NCLB 2001). Biesta argues from a philosophical and epistemological perspective, deploying Dewey, that knowledge about 'what works' does not produce knowledge about an external world, but rather adds to our stock of 'symbolic resources' about the relationships between our actions and their consequences in particular situations. I would agree, but this is only half the story. A different or additional way of approaching this would be to meet methodology with methodology and address the issue of generalisation. RCTs should be employed, it is claimed, because the sampling techniques allow the variable (intervention) under consideration to be isolated and studied. They allow research to "demonstrate conclusively that if teachers change their practice from X to Y there will a significant and enduring improvement in teaching and learning..." (Hargreaves 1996, p. 5). But, even if this were demonstrated to be the case in an experimental setting (and it is a big 'if', see below) it would be extremely difficult, if not impossible, to reproduce the experimental intervention in many other varied settings. Human interaction, especially in complex organisations such as schools, is not so easily controlled. Interestingly enough, this is well understood by many proponents of the use of RCTs in social experiments, who advocate using mixed methods rather than solely relying on experiments. For example Cook and Payne (2002, p. 169), in a contribution to an 'evidence conference' specifically convened to discuss such issues, note that:

The advantages of case study methods are considerable . . . Case study methods complement experiments when . . . it is not clear how successful program implementation will be, why implementation shortfalls may occur, what unexpected effects are likely to emerge, how respondents interpret the questions asked of them [or] what the causal mediating processes are . . . qualitative methods have a central role to play in experimental work . . .

Only RCT advocates in educational research seem not to know this, either raising issues of their competence, or perhaps their self-interest in trying to sell particular methods to government?

Moreover many of the experiments funded under new US government legislation in the early 2000s are now producing results that do not indicate "significant and enduring improvements in teaching and learning". Viadero (2009) reports:

Like a steady drip from a leaky faucet, the experimental studies being released this school year by the federal Institute of Education Sciences are mostly producing the same results: "No effects," "No effects," "No effects." The disappointing yield is prompting researchers, product developers, and other experts to

question the design of the studies, whether the methodology they use is suited to the messy real world of education, and whether the projects are worth the cost, which has run as high as \$14.4 million in the case of one such study (unpaginated).

So it would seem that the methodology is proving as problematic as the philosophy might indicate, though one imagines that such disappointing results will carry more weight than appeals to Dewey. It is not that appeals to Dewey are irrelevant. The nature of professional knowledge and judgement are very important in considering how improvements in educational activities and outcomes might be achieved; but they are not enough.

Interestingly, we have been here before. It was precisely the confounding problems of diverse implementation and interaction effects that produced so many experimental studies reporting 'no significant difference' in the results of curriculum innovations in the 1960s. Reflections on such results prompted the development and use of more qualitative methods in evaluation studies in the first place, in the 1970s and 1980s (Cronbach 1975; Cronbach et al. 1980; Guba and Lincoln 1981; Hamilton et al. 1976; Stake 1967, 1978; Stenhouse 1975).

Stenhouse (1975, p. 82) in particular argued that, "Education as induction into knowledge is successful to the extent that it makes the behavioural outcomes of the students unpredictable." He took a very Deweyan line when arguing that a curriculum should be treated as a hypothesis about knowledge articulated in a form that could be put to the test of practice in classrooms:

A curriculum [is] a particular form of specification about the practice of teaching. . . It is a way of translating any educational idea into a hypothesis testable in practice. It invites critical testing rather than acceptance.

(p. 142)

This was the foundation of his argument about the need to develop 'teachers as researchers' if schools and classrooms really were to improve through deploying research, but research methods rather than research findings:

. . . there can be no educational development without teacher development; and the best means of development is not by clarifying ends but by criticising practice.

(p. 83)

His colleague, Barry MacDonald (1974), likewise raised the issue of the democratic deficit of evaluation studies, and the need to move beyond simply providing privileged information for powerful decision-makers. He identified three ideal types of approaches to evaluation – 'Autocratic', 'Bureaucratic' and 'Democratic' – aligning 'autocratic' with scientific research, 'bureaucratic' with confidential, technical collaboration, and 'democratic' with providing information for the widest possible public audience:

Autocratic evaluation is a conditional service to . . . government . . . It offers external validation of policy in exchange for compliance with its recommendations . . . the evaluator . . . acts as

expert adviser ... [] ... Bureaucratic evaluation is an unconditional service to ... government ... The evaluator ... acts as a management consultant ... the report is owned by the bureaucracy and lodged in its files ... [] ... Democratic evaluation is an information service to the whole community about the characteristics of an educational program ... The democratic evaluator recognises value pluralism and seeks to represent a range of interests ... techniques of data gathering and presentation must be accessible to non-specialist audiences ...

(MacDonald 1974 reprinted 1987, pp. 44–45)

Evidence-based practice would seem to lie somewhere along the continuum from autocratic to bureaucratic evaluation: claiming the legitimacy of (independent) ‘science’ but actually being largely beholden to the state bureaucracy.

Biesta concludes his paper by arguing that “the role of the educational professional ... is to utilize research findings to make their problem solving more intelligent” (p. 398). Again, I would agree, but such problem-solving cannot be confined to the classroom, it must also include discussions with parents, students and the wider community about the nature and purpose of education. Biesta’s focus on professional knowledge is too narrow to form the basis for a persuasive argument for change. It is too easily dismissed by the ‘producer capture’ argument which has formed the basis for much evidence-based advocacy in the first place – i. e. the need to replace professional knowledge by research evidence. To be fair, Biesta does argue that questions about ends as well as means must be explored by “all those with a stake in education... [including] all citizens” (p. 398), but given what has gone before, it might be argued that the chapter should start, rather than finish, with this problem.

Democratic and deliberative approaches to educational research have been explored in various settings (cf. Simons 1987; House and Howe 1999) but, unsurprisingly, have found little favour with policy makers. So the issue is how to connect such aspirations to community interests. Currently governments on both sides of the Atlantic are claiming to address increasing calls for more flexibility in the curriculum and more local control of schools via Charter Schools, Trust Schools, Free Schools, and so on. The argument about the need to develop more local forms of stakeholder involvement has become a very powerful one, reflected in policy, but such arguments are currently being realised in action via forms of governance and curriculum decision-making that are likely to promote the privatisation of schooling rather than the democratisation of schooling. They are being interpreted and enacted in a context dominated by consumerism rather than democratic engagement. Educational researchers and educational professionals more generally need to think about new ways of connecting with local aspirations and local agendas, to treat the community as a potential resource (rather than a potential problem that education has to ‘fix’), and thus to engage the community in the co-construction of knowledge about how better to educate our children. In this endeavour

Dewey’s transactional theory of knowledge is as appropriate to the process of engagement and of transforming the nature of the research process, as it is to learning about what does and doesn’t work in classrooms.

Note on Contributor

Harry Torrance is Professor of Education and Director of the Education and Social Research Institute, Manchester Metropolitan University, UK. His research interests include the interrelation of assessment, teaching, and learning testing and educational standards the role of assessment in educational reform qualitative research methodology the development of applied research and the relationship between research governance and research management. He is editor of the four-volume *Sage Handbook of Qualitative Research Methods in Education* (Sage 2010), a former editor of the *British Educational Research Journal*, and an elected member of the UK Academy of Social Sciences.

References

- Baez B, Boyles D (2009) The politics of inquiry: education research and the ‘culture of science’. State University of New York Press, Albany
- Barbour R, Barbour M (2003) Evaluating and synthesising qualitative research: the need to develop a distinctive approach. *J Eval Clin Pract* 9(2):179–185
- Blunkett D (2000). Influence or Irrelevance: can social science improve government? Speech to ESRC, reprinted in *Research Intelligence*, British Educational Research Association, No.71. 2 February, Economic and Social Research Council, Swindon, online at: <http://www.bera.ac.uk/system/files/BERARI071.pdf>
- Cook T, Payne M (2002) Objecting to the objections to using random assignment in educational research. In: Mosteller F, Boruch R (eds) *Evidence matters: randomized trials in education research*. Brookings Institution Press, Washington, pp 150–178
- Cronbach LJ (1975) Beyond the two disciplines of scientific psychology. *Am Psychol* 30:116–127
- Cronbach LJ et al (1980) *Toward reform of program evaluation*. Jossey-Bass, San Francisco
- Department for Business, Innovations and Skills (2009) Higher ambitions: the future of universities in a knowledge economy. <http://www.bis.gov.uk/policies/higher-ambitions>. Accessed 11 Dec 2009
- Gorard S (with Taylor C.) (2004) *Combining methods in educational and social research*. Open University Press, Maidenhead
- Greenberg D (2001) *Science, money and politics*. University of Chicago Press, Chicago
- Guba E, Lincoln Y (1981) *Effective evaluation: improving the usefulness of evaluation results through responsive and naturalistic approaches*. Jossey-Bass, San Francisco
- Hamilton D, Jenkins D, King C, MacDonald B, Parlett M (1976) *Beyond the numbers game*. Macmillan, London
- Hammersley M (1997) Educational research and teaching: a response to David Hargreaves’ TTA Lecture. *Br Educ Res J* 23(2):141–161
- Hammersley M (2001) On systematic reviews of research literature: a narrative response. *Br Educ Res J* 27(4):543–554
- Hammersley M (2005) The myth of research-based practice: the critical case of educational inquiry. *Int J Soc Res Methodol* 8(4):317–330
- Hargreaves D (1996) *Teaching as a research based profession*. TTA Annual Lecture. TTA, London

- House E, Howe K (1999) *Values in evaluation and social research*. Sage, Thousand Oaks
- MacDonald B (1974) *Evaluation and the control of education*. Reprinted in Murphy R, Torrance H (eds.) (1987). *Evaluating education: issues and methods*. Harper & Row, London
- MacLure M (2003) *Discourse in education and social research*. Open University Press, Maidenhead
- MacLure M (2005) 'Clarity bordering on stupidity': where's the quality in systematic review? *J Educ Policy* 20(4):393–416
- Mosteller F, Boruch R (eds) (2002) *Evidence matters: randomized trials in education research*. Brookings Institution Press, Washington, DC
- No Child Left Behind Act (2001) Public Law No. 107–110. <http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf>
- Simons H (1987) *Getting to know schools in a democracy: the politics and process of evaluation*. Falmer Press, London
- Slavin R (2002) Evidence-based education policies: transforming educational practice and research. *Educ Res* 31(7):15–21
- Stake R (1967) The countenance of educational evaluation. *Teach Coll Rec* 68:523–540
- Stake R (1978) The case study method in social inquiry. *Educ Res* 7(2):5–8
- Stenhouse L (1975) *An introduction to curriculum research and development*. Heinemann, London
- Tooley J, Darby D (1998) *Educational research: a critique*. OfSTED, London
- Torrance H (2008) Overview of ESRC Research in Education: a consultancy commissioned by ESRC: Final report. <http://www.sfre.ac.uk/uk/>
- Torrance H (2011) Qualitative research, science and government: evidence, criteria, policy and politics. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 4th edn. Sage, Thousand Oaks
- Viadero D (2009, March 31) 'No effects' studies raising eyebrows. *Education Week* 28(1):14–15

Phil Hodkinson

Abstract

A common perception is that scientific principles should govern the value of social research. This paper argues that this is a dangerous oversimplification. Rather, decisions about whether research is sound are made through inherently political processes. Normally these processes are micro-political, as groups of academics struggle for the acceptance of their work and/or for the exclusion of work that they deem to be unacceptable. In recent years, in the USA and the UK, an additional macro-political dimension has been added, as Governments strive to control the types of research which they believe can be legitimately funded, within the field of education. Micro and macro political perspectives became intertwined, as academics whose views coincided with those of government supported the imposed approaches, whilst those who did not agree opposed them. The paper describes and explains some of the ways in which political processes work to determine research quality, and argues that the extent to which such processes are themselves legitimate are value judgements which are contested within the very political process of which they are part.

Keywords

Research quality • Micropolitics • Macropolitics • Politics of research • Legitimation

Introduction

As the twenty-first century progresses, the relationship between research and politics has been increasingly foregrounded, especially in the social sciences. At one level this is unsurprising. Much of the funding for such research comes from national governments, either directly or indirectly. In England, for example, there are three sources of government research funding. Firstly, the government provides a large part of the basic resources needed to run Higher Education, money that is distributed through the Higher Education Funding Council for England (HEFCE). Part of this funding is explicitly linked to research, and is allocated through a complex Research

Assessment Exercise (RAE), now Research Excellence Framework (REF). Secondly, the government pays for the largest and most prestigious research project funding scheme, through the Economic and Social Research Council (ESRC). Thirdly, the government directly commissions research. When such a government is laying out millions of pounds for research expenditure, it wants value for money. This demand brings in its wake a range of political pressures on all aspects of the conduct of research, including its legitimation.

Yet for many researchers, it is a basic tenet that research should be above politics. Hammersley (1995) argues that research can and should be value-neutral. Researchers should tell it like it is, regardless of external pressures or favours. Without this academic independence, the argument goes, research loses its central defining principle of rigorous objectivity. I share with Hammersley and others a concern about recent government interventions into the research process. However it is a fundamental mistake to pose the

P. Hodkinson (✉)
School of Education, University of Leeds, Leeds, UK
e-mail: p.m.hodkinson@leeds.ac.uk

problem as a dichotomy between research on the one hand and politics on the other, for the legitimisation of research is an inherently political process.

In order to understand this claim it is helpful to think of two different types of politics. The first is macro-politics. By this I mean the politics of policymaking and government, at national, regional local and increasingly international scales of action. In Western democracies, this is the politics of the party systems, of elections, etc. In all states, it includes the processes of policy determination, policy enforcement, policy enactment and policy resistance. The second is micro-politics. This term was coined by Hoyle, when analysing the work of schoolteachers. He defined it as ‘the strategies by which individuals and groups in organizational contexts seek to use their resources of authority and influence to further their interests’ (Hoyle 1982, p. 88). Though he focused explicitly on micro-politics within organisations, I use the term more generally to include the day-to-day politics at the heart of the workings of academic research communities. Like macro-politics, this operates at different scales: within institutions and departments (Hoyle’s concern), but also within national and international research groupings and organisations. This micro-political activity is overlooked in calls to take politics out of research. Yet, as I will argue later, macro and micro politics are interwoven. Indeed, the very calls for the research community to mobilise in resistance to government interference are themselves both micro and macro political acts.

The dominant view of research legitimacy within academe focuses on procedural objectivity. Drawing from the physical sciences, this view is that social science research is legitimate if it is valid, reliable and generalisable. These qualities can be judged through a careful examination of the methodology used, with a particular focus on objectivity and the minimisation of bias. In addition legitimate research tells us something interesting or useful, which adds to what is already known. Given the rise of qualitative and case study research in the social sciences, many researchers modify and loosen the scope of these procedural requirements. Indeed, it is often argued that qualitative case study research can never be very reliable, because the methods cannot be repeated to demonstrate identical findings, or generalisable, because no case study can fully represent the wider population of which it is part (Gomm et al. 2000; Stake 1995). Despite these ameliorations, the prime focus in most methods texts remains on the significance of methodology in determining legitimacy, and on objectivity as central to this process. What follows is a need for agreed criteria against which a piece of research can be judged, to determine its legitimacy. Sometimes, this is referred to as the warrant for the research.

For reasons which have been widely articulated in the research methods literature, this broad stance towards

research legitimacy has been under prolonged and repeated attack. Many of the issues in this attack have been dealt with elsewhere in this volume, particularly in Chap. 50 by John K. Smith. My own position is set out in Smith and Hodkinson (2005). The core argument of these attacks is that research objectivity is impossible, because researchers can never completely separate themselves from the objects of their study. It follows that if objectivity is unachievable, then criteria for judging research legitimacy based upon methodological objectivity are not appropriate. As Schwandt (1996) argues, we need to move beyond criteriology. Of course, the position adopted by Smith, Schwandt and others is far from universally accepted. Hammersley (1990, 2009a) for example, argues that we can and should use the same broad criteria to judge the legitimacy and worth of any research piece (See Hammersley 2009a, b; Smith and Hodkinson 2009, for a debate between these two different positions). Also there have been recent calls for social science educational research to be judged more rigidly against ‘scientific’ or positivist research procedures, with an explicit reference to generalisability (Feuer et al. 2002; National Research Council 2002).

Much of this debate about research legitimacy consists of carefully argued assertions about how research should or should not be judged. These arguments are important to the on-going strength and well being of social science research, yet there is no sign of a generally accepted resolution, despite frequent calls from some participants in the debate that such a resolution is necessary (Feuer et al. 2002). It is this failure that draws attention to the micro-political nature of research legitimisation.

Two points can be dealt with quickly. Firstly, even those who argue that we should have a broadly agreed set of criteria to judge social research each produce different lists of what those actual criteria should be. This is partly because, as Smith (1990) points out, no list of criteria can ever be definitive. That is, new criteria can always be added, and others taken away. This leads Sparkes (2002), for example, to describe and justify numerous different ways in which qualitative research in Sports Science can be legitimately judged. Given this proliferation of possible criteria and lists of criteria there are no agreed procedures to use in order to determine which of these many alternative lists of criteria should be adopted – either universally or in particular cases (Garratt and Hodkinson 1998).

The second point is that many of the lists produced favour one type of research over another. Thus, if criteria drawn up on the assumption that randomised controlled trials are the best and most robust research method (Oakley 2000), then much qualitative research will largely fail. Similarly, if some of the ways of judging qualitative research advanced by Sparkes (2002) were applied to such experiments, the reverse would happen, and the research based upon

randomised controlled trials could be seen as reductionist, in what many claim is an inherently complex and relational social world (Flyvbjerg 2001).

These two issues illustrate a more fundamental issue, which is that different researchers and groups of researchers hold very different views about the nature of research legitimacy, and the ways in which research can and should be judged. At least until such differences can be mutually resolved, judgements about social science research remain contested within the field, and the playing out of those judgement contests will be inherently micro-political, as different individuals and groups strive to advance their own positions. One of the results of such political disagreements is a fragmentation of the research field, where, for example, journals use very different criteria to judge the legitimacy of published research.

For researchers of a more positivist or post-positivist bent, this fragmentation and the failure to agree and adopt criteria based upon research objectivity are symptoms of the immaturity of educational and social science research. Feuer et al. (2002) argue that educational researchers in the United States must learn to pull together behind an agreed list of broad procedural principles for all research. Interestingly, they offer no explanation for the failure of the educational research community to do this already, implying that those who do not share their position and accept these principles are misguided and even self-indulgent. In calling for all educational researchers to pull together as what they term a community of practice, Feuer et al. (2002) clearly believe that it is purely a matter of choice that many do not already do so.

One of the many ironical paradoxes that are found within research legitimization debates centres upon this claim. Feuer et al. (2002) see research as establishing facts upon which educational policy and practice should be based. Yet in relation to their own argument, they seem unable to either accept or deal with the fact that very many serious and thoughtful researchers take divergently differing approaches to the issue of research legitimization. That is, not only are very many eminent educational researchers unwilling to unite behind Feuer et al.'s principles, but also they are unable to do so without fundamentally changing their deeply held beliefs about research. Even relatively slight differences of view on these matters can be impossible to resolve. Martyn Hammersley and John K. Smith have been arguing for years (see earlier references), without either being able to convince the other.

The on-going failure to resolve these sorts of argument originate in the complexities of the legitimization debate in relation to social science, as outlined by Smith elsewhere in this book. There are many different positions taken and defended, and the protagonists each believe that their own position is superior to the others. The nature of the debate, which normally takes place within the academic discourse of

logical argument, conceals an important underlying truth. When researchers adopt particular positions in relation to research and research legitimization, those positions often become a key part of their professional identity as researchers. One way to understand this claim is through Bourdieu's concept of habitus.

For Bourdieu (Bourdieu and Wacquant 1992), a person's habitus is a battery of dispositions, which orientate us towards all aspects of life and the world in which we live. These dispositions are partly discursive and cognitive, but are also embodied and partly tacit. That is, they also have physical, practical, affective and emotional dimensions. The dispositions which make up the habitus are developed throughout our lives, arising from our social and historical positions in the world, and our ongoing experiences living in the world. Amongst other things, these dispositions show the ways in which social structures act within and through the person. These dispositions are enduring, but can and do change – often gradually and imperceptibly, occasionally rapidly and dramatically, for example through what Denzin (1989) terms an epiphany. A person's dispositions will strongly influence their feelings, thoughts and actions in any situation they find themselves in. Those dispositions make some thoughts and actions easy, others difficult, others impossible. Followers of Bourdieu often examine the significance of the habitus in the lives of their research subjects. The argument can be equally applied to the researchers themselves, and the ways they think about and conduct their research.

For example, my own relativist position in relation to research legitimization has developed over many years. Whenever I read something on research methodology, I can only do so from within previously established dispositions. These dispositions may be strong and well formed, or weak and provisional. When I engage with that literature it may cause me to rethink aspects of my prior beliefs and ideas, and my dispositions towards research legitimization may change. Alternatively, the engagement may reinforce and strengthen established dispositions. When I read something that challenges my existing beliefs, a range of reactions is possible, including the need to rethink my position more carefully, in order to clarify why I do not agree with the challenge. As my own research career has progressed, my thinking about research legitimization has modified and gradually firmed up and strengthened. My views may continue to change, but it becomes less likely that I will encounter arguments that I have not met before.

This process of dispositional development does not take place simply through reading, but also through the conduct of research, through formal and informal conversations and through writing and publication. As my beliefs strengthened, they became a central part of my researcher identity. My allegiance to them became more than intellectual. Attacks on

my beliefs, even when not directed at me personally, have an emotional impact. When reading such an attack, my research identity feels under threat.

Other researchers can be as deeply committed to their positions as I am to mine. The commitment centres upon a rational belief in the logic of the arguments within a deeply held position, but always involve more than that. This is why Feuer et al. (2002) were being naïve in calling for all researchers to unite around an agreed position. Deeply held dispositions do not change easily. One might as well ask all committed socialists to become right wing free market thinkers, overnight.

Research and Micro-Politics

Thus far, I have considered issues of research legitimation from two perspectives. I have challenged the common assertion that such issues are simply a matter of research technicality, and advanced the alternative view that individual researcher dispositions and identities are important. Now it is necessary to consider the social dimension, for individual researchers are part of wider professional and academic groups and communities. As researchers, we seek out others whose interests are similar to our own. Often, this centres around those who research the same issues or topics as us. We need to ground our work in theirs, and we want them to recognise and value the contributions we are making. Such groupings often develop formalised structures, such as specialist journals and conferences, or special interest groups within larger research associations. Sometimes, researchers group together around more macro-political purposes, such as the advancement of a feminist agenda, or a drive to achieve better treatment for minority ethnic groups, or those defined as having ‘special educational needs’. There are similar associations around particular methodologies. For example, groups of expert researchers regularly share their expertise and interests in using the British Household Panel Survey (BHPS). This includes sharing new statistical techniques for analysing the data generated by the survey. Also, there are journals and research groups focussed on life history and auto-ethnography as methodological approaches, and several international journals are aimed explicitly at qualitative research.

Thus, debates about research legitimation involve groups and organisations, not just individuals. The result has been an on-going struggle around this issue for at least 20 years, since the first paradigm wars (Gage 1989). Individually and collectively, researchers strive for influence in the research field to which they belong. This micro-political striving is a normal and essential part of academic life. If we believe what we write, we should want to convince others of our arguments, for the benefit of the field as a whole. However,

the struggles involve more than the exchange of knowledge and ideas, and have a direct bearing on access to scarce resources, such as research project funding and space for publication in prestige outlets. As Bourdieu (1988) argued, academics are striving for distinction on the fields within which they work. That distinction is partly a matter of personal pride, but also of job security (getting tenure, avoiding redundancy), promotion and pay. Academe is a highly hierarchical and competitive field, where the players of the game develop detailed knowledge of the numerous and often subtle signifiers of status and influence, for which they strive. Of course, not all academics strive for all forms of academic distinction. Some are more ambitious and competitive than others, and may value one form of distinction whilst others value a different form. Some strive to become professors, some strive for senior administrative positions, some strive for prestigious publications, for journal editorships, or for research income. Some strive to be good teachers and colleagues, some to use research and teaching to help others.

As Bourdieu’s writing makes clear, within any field, including academe, these competitive strivings for distinction are much more than individual struggles and are inherently unequal (Bourdieu and Wacquant 1992). Groups and individuals strive for success from very different and unequal positions, and with very different and unequal resources – what Bourdieu termed economic, social, cultural and symbolic capital. These unequal micro-political struggles concern the quest for distinction, but also the achievement of influence over what counts as distinction itself. In practice, these two aspects of the struggle are interwoven. Thus, one way of achieving distinction is through publication in a prestigious journal. One way of succeeding in this ambition is to gain influence over the criteria used by such journals to determine what is published and what is not – for example through joining the editorial board or becoming editor. At a more mundane level, academics search for prestigious journals that already like the sorts of things that they write, and either directly or indirectly strive to maintain or raise the status of the journals they use. Sometimes we change the ways in which we write in order to get things accepted in journals whose criteria and conventions differ from those we centrally support and believe in. The other side to this striving for publication, research money or promotion is the equally important striving to exclude from funding, publication and promotion work or, in the last case, people whose work we believe is sub-standard. Such refereeing advice and editorial, funding committee or promotion committee decisions are centrally concerned with struggles to establish and/or maintain particular views of distinction. The supervision and examination of research degree work entails the same struggle and purposes. I have often come across examples of research students being forbidden by the supervisors from doing things

which I would regard as appropriate, and the choice of an external examiner for a thesis legitimately entails identifying someone sympathetic to the approach taken by the student.

All these and other normal academic activities are essential to the functioning of the academic research field, yet they are fundamentally micro-political. These micro-political processes only become 'improper' when someone uses their influence illegitimately to gain personal advancement, the unfair advancement of a friend or protégé, or the unfair blocking of the legitimate work or advancement of another. However, the decision about what forms of activity are illegitimate itself depends upon the rules of the academic game, and these rules are, in turn, determined through the struggles within the field.

In these micro-political struggles, research legitimation plays a fundamental role, because it underpins most of the currently accepted facets of and criteria about distinction. This may be why debates about research legitimation so often generate as much heat as light, provoking very strong feelings from participants. For struggles over the principles and criteria that govern research legitimation concern not just our individual sense of professional identity, but also our individual and collective ability to succeed in the field within which we work. This being the case, arguments that such issues only concern the achievement of technical standards about which all can easily agree are at best a form of what Bourdieu termed *misrecognition*: a failure to appreciate the real nature of the micro-political processes which lie behind such technical claims. At worst, they are an ideological smokescreen, through which the powerful protect and legitimate their preferred positions. This misrecognition also works to enhance the superior status of academic knowledge in wider public and policy debates, to which I turn next.

Research and Macro-Politics

Pressure for a greater macro-political research engagement comes from two different directions, with opposite emphases. The first direction comes from within the research community. This is because many social science researchers wish their research to make a difference to the world that they research. In fields as diverse as health care, social services and my own specialism, education, many of us want our research findings to improve provision. This improvement is often centred upon a deeply held desire to improve the lives of less advantaged members of society, but in other cases focuses more on improving the technical effectiveness of provision. The difference between these two approaches to improvement is closely related to differences in approach to methodology and research legitimation, which I turn to later. This drive to make a difference sometimes results in direct attempts to influence policy, and/

or to bemoan the lack of attention paid to research by policy makers. It is this type of political engagement that Hammersley (1995) warns against. For him, by adopting what I term a macro-political stance, researchers surrender key aspects of their claim to expert status and, much more seriously, open the research community up to political interference from outside. The second pressure for a macro-political dimension for research comes from governments and politicians. This pressure has been evident in both England and the United States, where there has been a strongly expressed government insistence for research to make a direct contribution to improve things. Of course, improving things normally means helping those in power do better what ever it is they want to do. That is, the emphasis is on technical improvement, not on improving the lives of the disadvantaged or oppressed. Recently, there have been pressures for educational research to help the U.S. and English governments achieve their policy objectives. In both countries, this was explicitly related to a call for 'evidence-based practice' and for research to identify 'what works'.

In 2000, the Secretary of State for Education in England addressed the ESRC with a demand that:

Social science should be at the heart of policy-making. We need a revolution in relations between government and the social research community – we need social scientists to help to determine *what works and why*, and what types of policy initiatives are likely to be most effective (Blunkett 2000, cited in Evans et al. 2000, p. 1, emphasis added by them).

As I have argued elsewhere (Hodkinson 2008; see also Hammersley 2002), this government pressure for research to determine what works coincided with a drive from within the academic research community for a scientific approach to educational research, with the explicit purpose of providing robust evidence to improve policy and practice. As Thomas (2004) points out, central to this approach is a need to produce robust syntheses of the findings of many research projects, in order to produce safe generalisable guides to action. These combined pressures resulted in much political debate. Many comments by national political figures, and any linked press coverage, adopted the general stance that British educational research was too often of poor quality and/or largely irrelevant (Hammersley 2002). Within the educational research community, there were mixed reactions. There were many supporters of this new evidence-based policy and practice approach. There were also many opponents.

In 2001, the United States federal government followed a similar path to that in Britain, but in a much more draconian form. The No Child Left Behind Act legally required all researchers using government funding for educational research to adopt the methodological principles of evidence-based practice. This was an unprecedented direct

macro-political intervention into the existing struggles over research legitimisation, backing positivist (Oakley 2000) or post-positivist (Phillips and Burbules 2000) research principles. This government intervention went much further than exhortation, involving a direct legal control over one of the major sources of research funding. This intervention provided a direct and substantial threat to the careers of American educational researchers and groups of researchers who were committed to work in ways that lie outside these legal principles.

In the UK, government pressures were more subtle but important, none the less. Arguably the most significant intervention was indirect. The government has put increasing and sustained pressure on the ESRC and on the HEFCE to place increased emphasis on the value of any research they fund to what are termed 'users'. This means that user value is now a routine criterion against which all funding applications to ESRC have to be judged. This user interest was also applied to the means of judging the amounts of general research income should be awarded to social science disciplines through the Research Assessment Exercise (RAE). For example, the 2008 Panel which determines research grades in education was made up of 20 experts including four members chosen from user organisations, including some government funded and regulated educational quangos, but perhaps unsurprisingly not including teachers' Trades Unions. The outcomes of the RAE directly influence University funding and the prestige of the University and of its constituent departments. League tables are constructed by the specialist press based upon the panel evaluations, and most of not all British universities are increasingly concerned to improve their standing in those league tables.

In my terms, the English government engaged in deliberate macro-political interventions intended to influence what counts as legitimate social and educational research, and who is entitled to make those value judgments. The workings of the ESRC committee and referees who decide which project applications will be funded and which will not, and of the HEFCE subject panels which will determine the research gradings and therefore the funding and status of departments, will themselves work micro-politically. There will be strategies and struggles, alliances and conflicts.

The second British government approach was to substantially refocus research funding in education, through initiatives centred upon evidence-based approaches, but without the enforcement of legislation. They established and paid for a major research centre, the Evidence for Policy and Practice Information and Coordinating Centre (EPPI), in 2000. The centre's job was to carry out systematic reviews of educational research findings, to establish valid, reliable and generalisable findings that could then be safely used by policy makers and practitioners. As MacLure (2005) shows, the procedures adopted by EPPI in conducting these

reviews were broadly positivist, in line with the thinking of the Centre's director (Oakley 2000, 2003). MacLure also argues that the procedures are deeply flawed and the outcomes risible. Despite her attack, as the EPPI reports were progressively published, the effect was to label research that did not fit their criteria as of no value, whilst promoting and valuing studies that did fit their pattern.

Another major government-led innovation was the Teaching and Learning Research Programme (TLRP). The Programme has been allocated an unprecedentedly large sum of money to fund research projects (£43 m between 2000 and 2007). Most of that funding was not new, but came from a top-slice of the existing HEFCE grant to universities for educational research. The TLRP remit was to produce robust educational research that would directly contribute to the improvement of teaching and learning. In order to overcome perceived weaknesses in the educational research field, projects were to be large (often between £400 k and £1 m). There was an initial unwritten presumption that most would be experimental, quantitative or at least involve mixed qualitative and quantitative methods. Project funding was allocated through normal ESRC competitive bidding procedures. In line with the new conventions, the programme steering group, which made the final decisions about which projects to fund, contained significant research users, alongside eminent researchers.

The Interrelations Between Macro and Micro Politics

In both Britain and the USA, the macro-political interventions by government are working alongside strong micro-political efforts to reintroduce and/or reinforce positivist views on research legitimisation. I have argued elsewhere (Hodkinson 2008) that both positivism within the research community and the 'what works' policy initiatives are underpinned by the same forms of technically rational thought. In both cases, the assumption is that good social research will produce findings that are unarguably valid, reliable and generalisable; and that such research can directly lead to better social provision. The parallel is often explicitly medical – educational research should produce the equivalent of a successful treatment for asthma, and governments and educational providers can all use this treatment in their work. For many protagonists in both groups there is a further political ambition to be achieved, because the focus on the technical, in teaching or in research, brackets off social problems of deep-seated inequality or cultural diversity. Schools are 'poor' (they get low measured achievement grades) because of poor teaching, not because their intakes are deeply disadvantaged. Torrance (2008) argues that the policies currently promulgated under this

'what works' agenda invoke the need to address educational disadvantage as a key legitimating purpose. However, 'disadvantage is conceptualised (theorised) as a social problem that can be addressed by education, rather than an economic problem which might be addressed by higher wages and/or stronger employment legislation' (Torrance 2008, p. 8). What follows is that if people fail despite scientifically proven educational provision, it is their own fault.

In advancing this shared agenda, there is a valuable political alliance for the politicians and the positivists. For governments like those in Britain and the United States, the arguments of the positivists (National Research Council 2002, 2004; Oakley 2000, 2003) provide reassurance that what they desire can be achieved, and purport to show how it can be done. For the positivist researchers, the external macro-political intervention of governments enormously strengthens their micro-political position and resources in the research field. For those who do not share their views, it is as if the positivists have welcomed the use of governmental power to force through values and procedures in the field, having failed to win the rational argument.

If the introduction of government enforced views on research legitimization was both macro and micro-political, so were the reactions to it. The introduction of the TLRP was macro-political, but from the start, the micro-politics of legitimization was inherent in its operation. Though there are no published records of the workings of the steering committee, it is safe to assume that meetings entailed arguments and struggles over how competing research projects should be judged, and over which would be eventually funded. From within the educational research field, there was a micro-political dimension to the responses to the programme. As had no doubt been intended, the size of the funding on offer provided a major incentive for researchers to bid for it, and very many did. Such research funding not only gave successful applicants the resources to do research that they wanted to do, but also brought with it prestige and status. Many researchers whose research identity and research principles were at odds with the espoused stance of the TLRP, still worked to win the funding. This resulted in strategic compliance, as such researchers strove to construct proposals that would allow them to work in ways they preferred, but were worded to maximise their chances of getting funding. Surveys were added to predominantly qualitative proposals, and sometimes claims were made about impact on practice that were unlikely to be achieved.

Occasionally this micro-politics became confrontational. My first successful TLRP bid was as part of a research network looking and improving learning in the workplace. Initially, the funding for this network was conditional, because the TLRP steering group felt that we had only partly met their rigorous methodological standards. The research team responded to the conditions, and then had an informal

meeting with the original Programme Director, Charles Desforges. After this, my project was instructed to do some more methodological work, to establish ways to measure learning outcomes in the workplace, in order to establish the extent to which learning at work could be improved. This challenge resulted in a later publication about the dangers of focusing research on learning at work on measured outcomes (Hodkinson and Hodkinson 2004). Long before that happened, I had a meeting with Professor Desforges, and was informed that unless I toed the required line, he would fund the rest of the network, but without my project. There followed further micro-political activity before the network was allowed to proceed in its entirety.

Though I have my own personal views about the appropriateness of some of this pressure, my argument here does not concern the legitimacy or otherwise of the micro-political processes around the TLRP. My point is to establish that the TLRP was directly concerned with the nature of research legitimization, and that its influence and eventual effects upon the thinking and practices of research legitimization were both micro- and macro-political. This political activity was directly concerned with establishing access to resources and prestige in the research field. The eventual and on-going influences on research legitimization were the result of this micro-political activity, which in turn was influenced by the unequal positions and capital of the political players. My own position was supported by the fact that I was already a research professor of some standing, as part of a research network that contained other eminent researchers who stood together to deal with the threat to our work. I also used some of my social capital to raise the issue informally and indirectly with some members of the TLRP steering group.

Another good example of the interactions between the macro and micro politics of research legitimization concerns the recent growth of very powerful research ethics committees. Ethics Committee is the British name. In the USA they are called Institutional Review Boards (IRBs) and in Canada Research Ethics Boards (REBs). These are University organisations with the remit to prevent any unethical research operating in the institution's name. They vet all research applications made within or on behalf of the institution. At least in the UK, ethics committees are also run by other organisations – notably the regional health trusts that manage state-funded hospitals.

These ethics monitoring organisations have wide powers. If they refuse to sanction a research proposal, including a proposal by a new doctoral student, it cannot take place. They routinely require detailed changes to proposals, which sometimes radically change the original intention (Johnson 2008). As Boser (2007) points out, they exercise power as domination over researchers, and work on the assumption that researchers exercise power as domination over their research subjects. The exercise of this power by these bodies places

them right at the centre of political struggles over research legitimation. The macro-political dimension to their work arises through their place within current moves to reassert positivist research principles in social science research. In the USA, for example, Lincoln (2004) and Johnson (2008) demonstrate direct links between the ways IRBs are now working and the National Research Council (2002) report, which provided the academic underpinning to the earlier No Child Left Behind Act. When Lincoln attacks what she calls ‘the stark politicization of research and its methods’ (2004, p. 10), she means what I term macro-politics.

As ethics committees enforce positivist research approaches predominantly drawn from medical science (Boser 2007), the result is to place additional difficulties on research with people, i.e. the social sciences, and within the social sciences, upon those doing qualitative research rather than ‘safer’ large-scale surveys (Boser 2007; Johnson 2008; Patterson 2008). In the name of protecting research subjects from harm, such committees can prevent much research which qualitative researchers view as unproblematic from ever taking place. They can thus significantly harm the developing careers of qualitative researchers.

There will always be micro-politics in the workings of the committees themselves, as Johnson (2008) suggests. There is also micro-politics in the ways that researchers operate within the remits of those ethics committees. The journal *Qualitative Inquiry* has recently published several confessional tales from researchers, describing the difficulties they have faced in dealing with IRBs, and the various strategies they have had to resort to in responding to the power of the Boards. Johnson (2008) describes the need to adopt a docile role, being subservient and expressing gratitude for help, rather than confronting. She also describes how, in her case, getting ‘help’ from a Board member helped smooth the resubmission pathway, despite the fact that Johnson had not made all the changes that had been originally required. Her and other stories demonstrate that getting IRB approval is far from a technical process, though the assertion that the process is technical, with formal criteria and procedures, is a major political weapon regularly used by the Boards.

Conclusion

In this chapter my prime objective has been to establish that the research legitimation question is inherently political. It concerns changing balance of power in on-going struggles about the ontological and epistemological ideas that underpin research practice. The fact that debates about research legitimation are normally conducted in philosophical language using logical argument should not delude us into believing that this is all there is. I have argued that

underlying these abstract debates lie power struggles that directly and indirectly influence success and even survival within the academic community. I have further argued that, at the present time, there is a significant macro-political dimension to these struggles, which interacts with and significantly changes the power relations within the ‘normal’ ongoing micro-politics. Without in any way trying to belittle the significance of these macro-political interventions, it is a mistake to characterise the problem as the need to somehow separate research from politics. Rather, we need to find ways to fight micro and macro politically for the research approaches we value.

The micro-political processes of research legitimation are normal and essential for the healthy conduct of the field. Furthermore, given that much of the funding for social science research comes from government sources, and that governments have an interest in getting value for money, it is probably naive to argue that there is no place for macro-politics within research debates either. What is unusual and dangerous in the current situation, especially in the United States, is the direct involvement of government in the struggle over what counts as legitimate research.

For about the last 10 years, there has been a concerted and powerful positivist movement, operating at both macro and micro political levels. The purpose of this movement is to shift social science and especially educational research away from qualitative research, the place of which is assumed to be subservient at best to other more scientific forms of research (National Research Council 2002). This is happening despite a huge literature arguing that positivist social science does not work well and that qualitative case study research may be the best way forward (Flyvbjerg 2001). As a committed qualitative researcher myself, I find these positivist attacks deeply worrying and threatening, and they must be continually resisted.

I am also deeply concerned by the role played by national governments in pushing this partisan approach to research legitimation, which poses a major threat to academic freedom. In resisting these interventions, the struggle is to achieve the spaces needed to approach social science research in diverse ways. Feuer et al. (2002) call for the educational research community to combine behind a uniformly agreed and operated approach, in order to fend off government intervention. This amounts to doing what government wants voluntarily, in order to prevent compulsion. My argument here suggests the opposite. Until such time as all social science researchers freely agree to adopt a single position on research legitimacy, the survival of academic freedom depends upon sustaining diversity of approach. Only in this way can academics fend off unified and authoritarian political control. Continued robust arguments within academe about research legitimation are healthy, for

example by undermining complacency and intellectual stagnation. However, some parts of the social science research community would do well to remember the clichéd defence of democracy – ‘I fundamentally disagree with your arguments, but I will defend your right to express them’. Of course, in making this plea I am making my own micro-political intervention.

Acknowledgement I am grateful to John Smith and Deborah Gallagher, for their helpful comments on an earlier draft of this chapter.

Note on Contributor

Phil Hodkinson is Emeritus Professor of Lifelong Learning at the University of Leeds, in England. He has extensive experience of conducting research, using a range of qualitative methods within an interpretive conceptual framework. He has written widely on research methodology, with a central interest in making sense of what counts as legitimate qualitative research.

References

- Blunkett D (2000) Influence or Irrelevance: can Social Science improve Government? Secretary of State For Education and Employment, speech to the Economic and Social Research Council, 2 Feb
- Boser S (2007) Power, ethics, and the IRB: dissonance over human participant review of participatory research. *Qual Inq* 13(8):1060–1074
- Bourdieu P (1988) *Homo Academicus*. Polity, Cambridge
- Bourdieu P, Wacquant LJD (1992) *An invitation to reflexive sociology*. Polity Press, Cambridge
- Denzin N (1989) *Interpretive biography*, vol 17, *Qualitative research methods series*. Sage, London
- Evans J, Sharp C, Benefield P (2000) Systematic reviews of educational research: does the medical model fit? *British Educational Research Association Annual Conference*, University of Cardiff, Cardiff, 7–10 Sept
- Feuer MJ, Towne L, Shavelson RJ (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Flyvbjerg B (2001) *Making social science matter: why social inquiry fails and how it can succeed again*. Cambridge University Press, Cambridge
- Gage NL (1989) The paradigm wars and their aftermath – a “historical” sketch of research on teaching since 1989. *Educ Res* 18(7):4–10
- Garratt D, Hodkinson P (1998) Can there be criteria for selecting research criteria? – A hermeneutical analysis of an inescapable dilemma. *Qual Inq* 4(4):515–539
- Gomm R, Hammersley M, Foster P (eds) (2000) *Case study method*. Sage, London
- Hammersley M (1990) *Reading ethnographic research: a critical guide*. Longman, London
- Hammersley M (1995) *The politics of social research*. Sage, London
- Hammersley M (2002) *Educational research, policymaking and practice*. Paul Chapman, London
- Hammersley M (2009a) Challenging relativism: the problem of assessment criteria. *Qual Inq* 15(1):3–29
- Hammersley M (2009b) Closing down the conversation? A reply to Smith and Hodkinson. *Qual Inq* 15(1):40–48
- Hodkinson P (2008) Scientific research, educational policy and educational practice in the United Kingdom: the impact of the audit culture on further education. *Cult Stud Crit Methodol* 8(3):303–324
- Hodkinson P, Hodkinson H (2004) The complexities of workplace learning: problems and dangers in trying to measure attainment. In: Rainbird H, Fuller A, Munro A (eds) *Workplace learning in context*. RoutledgeFalmer, London, pp 259–275
- Hoyle E (1982) Micropolitics of educational organisations. *Educ Manage Adm* 10:87–98
- Johnson TS (2008) Qualitative research in question: a narrative of disciplinary power with/in the IRB. *Qual Inq* 14(2):212–232
- Lincoln YS (2004) Academic freedom, IRBs and the NRC committee report. In: *American Educational Research Association annual meeting*, San Diego, 2004
- MacLure M (2005) ‘Clarity bordering on stupidity’: where’s the quality in systematic review? *J Educ Policy* 20(4):393–416
- National Research Council (2002) *Scientific research in education*. The National Academies Press, Washington, DC
- National Research Council (2004) *Advancing scientific research in education*. The National Academies Press, Washington, DC
- Oakley A (2000) *Experiments in knowing: gender and method in the social sciences*. Polity Press, London
- Oakley A (2003) Research evidence, knowledge management and educational practice: early lessons from a systematic approach. *Lond Rev Educ* 1(1):21–33
- Patterson D (2008) Research ethics boards as spaces of marginalization: a Canadian story. *Qual Inq* 14(1):18–27
- Phillips DC, Burbules NC (2000) *Postpositivism and educational research*. Rowman & Littlefield, Lanham
- Schwandt T (1996) Farewell to criteriology. *Qual Inq* 2(1):58–72
- Smith JK (1990) Alternative research paradigms and the problem of criteria. In: Guba EG (ed) *The paradigm dialog*. Sage, Newbury Park, pp 167–187
- Smith JK (2013) Quality in educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 375–385
- Smith JK, Hodkinson P (2005) Relativism, criteria and politics. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 3rd edn. Sage, London, pp 915–932
- Smith JK, Hodkinson P (2009) Challenging neorealism: a response to Hammersley. *Qual Inq* 15(1):30–39
- Sparkes AC (2002) *Telling tales in sport and physical activity: a qualitative journey*. Human Kinetics, Leeds
- Stake R (1995) *The art of case study research*. Sage, London
- Thomas G (2004) Introduction: evidence and practice. In: Thomas G, Pring R (eds) *Evidence-based practice in education*. Open University Press, Maidenhead, pp 1–18
- Torrance H (2008) Education policy as a special case of theory: correlation, causation and the legitimation of intervention. Paper presented at annual conference of the American Educational Research Association, New York, 2008

Deborah J. Gallagher

Abstract

In this essay, I centre on the field of special education predominantly in the United States to provide a case study illustrating Hodkinson's micro/macro political analysis of the longstanding debate over research methodology.

Keywords

Disability studies in education • Research methodology • Epistemology • Politics of research • Journals

Introduction

Hodkinson's Chap. 54, provides a philosophically incisive and nuanced inquiry into the now decades long methodological debate in the social sciences. Asserting (rightly, I believe) that this debate is inherently political, he frames his analysis around macro- and micro-politics, demonstrating how the macro and micro levels are distinctly interwoven. After Bourdieu's concept of *habitus*, he observes that academic researchers stake out what are apparently staunch positions because where one stands on methodological issues emerges from one's deeply held and often tacit personal dispositions. The result of this balkanization is a "fragmentation of the research field." Importantly, Hodkinson further points out that procedural objectivity forms the dominant view of research legitimacy in that those claiming the mantle of "social scientist" view themselves as neutral brokers whose role is to provide the "facts" without weighing-in on policy issues. Thus, procedural objectivity is at the very core of the debate and is, indeed, the wedge issue.

In this essay, I center on the field of special education predominantly in the United States where the process of fragmentation is, in my estimation, very nearly complete.

In fact, the apparently insurmountable schism emerging from the debates over research legitimization in special education has led those of us who have contested the domination of the positivist, behaviorist, and medical model frameworks of disability research to initiate almost a decade ago the new field of *Disability Studies in Education*. Clearly, this signifies the unstated consensus that the divide is so great that initiating an entirely new field of study in the area of disability research appeared the only reasonable option for researchers wishing to center their work in alternative epistemologies. The overtly passionate, sometimes trenchant, tenor of these very public debates leading to the establishment of this new field makes for a particularly instructive case study illustrating Hodkinson's insightful analysis of the politics of legitimizing research.

Special Education: A Case and Commentary

It began quietly and innocently enough some three decades ago when the editors of leading special education academic journals began receiving manuscript submissions raising curiously philosophical questions about special education research's unqualified commitment to positivist epistemology (see Heshusius 1989; Iano 1986; Poplin 1987; Skrtic 1986). It was not that the editors were entirely unfamiliar with ideas that did not resonate with their own because for

D.J. Gallagher (✉)
College of Education, University of Northern Iowa, St Cedar Falls,
IA, USA
e-mail: deborah.gallagher@uni.edu

the prior several years publications had been appearing every now and again critiquing the medical model of disability and advocating an alternative sociological perspective (see Bogdan and Biklen 1977; Bogdan and Taylor 1976; Rhodes and Sagor 1975, for excellent overviews, see Heshusius 2004; Taylor 2006). Although the manuscripts they were now receiving took explicit aim at the field's revered research methodology, there seemed no harm in being expansively confident enough in one's own position to publish them, though not without proper rebuttal both in initial reviews and in print (see, for example, Adelman 1989; Carnine 1987; Licht and Torgesen 1989; Lloyd 1987; Forness and Kavale 1987).

By the early 1990s leaders in special education were beginning to take a far less tolerant view toward these and newer critics of the field's methodological integrity. What at first seemed novel, perhaps even quaint, now appeared overtly menacing. Heshusius (2004) provides a detailed chronicle of several like-minded colleagues' near futile efforts to publish in mainstream U.S. special education journals. In some instances, manuscripts were rejected "in-house" (by the journal's editor) as not fit to submit to the review process. Other editors rejected manuscripts by fiat, despite a majority of positive reviews.

Other manuscripts were rejected on the grounds that they were not "data-based" or because the author used first-person narrative, meaning that they did not meet the positivist criteria for what counts as "data." In one instance, the journal editor requested the author shorten the manuscript. When the author submitted the edited version, the *co-editor* rejected for being "inflammatory." Still another was rejected for "misrepresenting positivism" (Heshusius 2004, p. 190). Notably, all of the rejected manuscripts were later published in highly prestigious non-special education journals, including *Review of Educational Research*, *Journal of Adolescent Research*, *Disability and Society*, *Anthropology and Education Quarterly*, and so on (see Brantlinger 1994, 1997; Danforth 1999; Danforth and Navarro 2000). As Heshusius points out, however, the editors of the mainstream U.S. special education journals had successfully prevented critiques of positivist special education research from reaching their U.S. audiences.

As one of the colleagues Heshusius interviewed, I can attest to much the same treatment. I shared with her reviews from the *Journal of Learning Disabilities* that derided one of my manuscripts questioning the much touted scientific knowledge base of special education as "psychobabble," a "manifesto," and as "implicit Marxism." One reviewer, apparently having worked him or herself into a bit of a froth, opined that my paper sounded much like the "usual suspects," specifically naming prominent scholars Tom Skrtic and Mary Poplin as examples. I was astonished when the paper was later published in *Exceptional Children*, the flagship journal of mainstream U.S. special education

(see Gallagher 1998). It is important to add here that this publication constituted an incredibly rare event—so much so that I received letters and emails from equally astonished researchers I had never met expressing their congratulations for accomplishing such a feat.

Apparently this achievement was a "one-off" because my subsequent attempt to publish in *Exceptional Children* (under new editorship) was resoundingly rejected. Reviews of this paper were likewise disparaging. One reviewer scorned my "hard-line, anti-empirical position" that "failed to do justice to science." Another ridiculed the paper as "incoherent," "fashionable nonsense," and an "abuse of science," invoking Sokal and Bricmont's (1998) famous hoax on postmodernists. Yet another described my position as "fundamentalism," "demagoguery," and "totalitarianism." At the risk of stating the obvious, it is important to confirm that none of my reviewers attempted engagement, serious or otherwise, of the ideas I advanced. The paper was later published in *Disability and Society* (see Gallagher 2001).

The tone and tenor of the reviews did not trouble my colleagues or me as much as their failure to engage the ideas. The same lack of engagement was also evident in a series of published articles alternately defending "scientific" (positivist) research methodology and condemning those who questioned the assumptions of procedural objectivity (see, for example, Kauffman 1999; Kavale and Forness 2000; Mostert and Kavale 2001; Sasso 2001). In particular, we noted a number of strategies and tactics that offered the appearance of engagement, without actually doing so.

Most disturbing was the lack of indication in their references that these defenders qua critics had actually read or read carefully the philosophers of science we cited in our own work. More often, they cited works that concurred (or seemed to them to concur) with what they already believed (for example, Gross and Levitt 1998; Gross et al. 1996; Sokal and Bricmont 1998). When philosophers of science were cited, the apparent goal was simply to dismiss them out of hand or distort their work by carefully extracting from their contexts useful quotes. Revealing this disinclination to read, study, and reflect was the fact that they conflated all who did not agree with them, dubbing them all as "post-modernist," hence, "relativists" and therefore flawed by definition. Taking note of this propensity to take intellectual shortcuts, Judith Butler (1992) asked:

Do all these theories have the same structure (a comforting notion to the critic who would dispense with them all at once)? Is the effort to colonize and domesticate these theories under the sign of the same, to group them synthetically and masterfully under a single rubric, a simple refusal to grant the specificity of these positions, an excuse not to read, and not to read closely?

(Butler 1992, p. 5)

My own experiences confirm her suspicion and resonate with Hodkinson's observation that it is not only about ideas in any event.

In a published invited exchange I recently had with two of the leading critics of “postmodernism” and “relativism” in special education, I went to some lengths to explain why this philosophical conflation was inappropriate (see Gallagher 2006; Kauffman and Sasso 2006a, b). In their rejoinder, they dismissed my point as follows:

Relativists who agree on little else unite to view the concept of objectivity with suspicion. Therefore, *we do not need to quibble* about the various forms of critical theory given voice by the Frankfurt School; the two versions of poststructuralism posited respectively by Derrida and Foucault; at least six separate versions of postmodernism (i.e., Nietzsche and Hiedegger version, Paris 1980s version, art and architecture version, literary version, popular culture version, and Marxist version); and various forms of hermeneutics. Given this common critique of truth and objectivity by all forms of philosophical relativism, then, for most postmodernists to complain (as Gallagher and other have done) that their work has been misrepresented is to lapse into incoherence, and the larger public interested in this debate has been able to grasp this fact.

(Kauffman and Sasso 2006b, pp. 113–114, emphasis added)

The knowledgeable reader requires no elaboration or commentary on their position.

My colleagues and I are also confused by the recurrent declaration that any epistemology other than the positivists’ own is “bankrupt” or obviously flawed and will wither away on its own accord. If this is the case, why do they address the issue at all? This confident assessment is belied by more forceful and equally recurrent allegations that alternative epistemologies are dangerous and harmful. Kauffman and Sasso’s (2006a) rather hysterical assertion that, “The catastrophe created by postmodernism is as certain as that which would follow the release of anthrax spores in a crowded building” (p. 69) aptly captures the trepidation that threatens to overwhelm a façade of cool-headed and authoritative bravado.

Finally, it is unclear why they alternately view themselves as victims while accusing their challengers of engaging in “victimhood” (see Mostert et al. 2008). As Hodkinson points out, “For those who do not share their views, it is as if the positivists have welcomed the use of governmental power to force through values and procedures in the field, *having failed to win the rational argument*” (Hodkinson 2013, p. 413, emphasis added). Given that positivist methodology enjoys the force of federal legislation in the United States, it seems clear that positivist researchers are hardly the victims. I suspect the fact that they care to debate at all has little to do with presenting a defensible argument or entering a genuine dialog and more to do with a need to suppress their own misgivings.

Due to the macro- and micro-politics of this standoff in U.S. special education, the schism appears, as I indicated above, insurmountable—at least for the foreseeable future. Although some have made fleeting attempts to “bridge the divide” have been made (see Andrews et al. 2000), others clearly anticipate no such possibility. Indeed, Mostert et al. (2008) stated forthrightly that:

We cannot “get along” with postmodernists, because we see things very differently: Our “scientific” view cannot be reconciled with postmodernism because our view of reality rejects theirs while theirs rejects ours. There is no common ground. The real world of special education demands that there be conclusions *that at least approach a single truth*.

(Mostert et al. 2008, p. 280, emphasis added)

Thus, despite recent proposals from non-positivist researchers that the field at least open itself to a pluralism of ideas or “a practical and democratic reorientation of special education research” (Danforth 2006, p. 337), it seems unlikely that multiple epistemologies will be welcome any time soon.

The creation of the new field of *Disability Studies in Education* is clearly an attempt, as Hodkinson put it, to “fend off unified and authoritarian political control” (p. 414). Its rapid growth and increasingly international reach has provided outlets for research on inclusive education, advocacy, and policy among a community of scholars. It is not an ideal solution, but it is one that provides the space for non-positivist researchers to slip the bonds of enforced research criteria. Most importantly, it provides young academics a chance to forge their own identities and commitments. And so long as space and opportunity exists, I remain hopeful that, to borrow a phrase from Lincoln and Cannella (2004), methodological conservatism and governmental regimes of truth cannot survive indefinitely.

Note on Contributor

Deborah Gallagher is Professor of Education at the University of Northern Iowa. Her research interest focuses on the philosophy of science as it pertains to research, pedagogy, and policy in education and special education.

References

- Adelman HS (1989) Paradigm accountability [reaction paper to Heshusius’ “the Newtonian mechanistic...”]. *J Learn Disabil* 22(7):420–421
- Andrews J, Carmine DW, Coutinho MJ, Edgar EB, Forness SR, Fuchs LS, Jordan D, Kauffman JM, Patton JM, Paul JM, Rosell J, Rueda R, Schiller E, Skrtic TM, Wong J (2000) Bridging the special education divide. *Remedial Spec Educ* 21(5):258–267
- Bogdan R, Biklen D (1977) Handicapism. *Soc Policy* 7(4):14–19
- Bogdan R, Taylor S (1976) The judged, not the judges: an insider’s view of mental retardation. *Am Psychol* 31(1):47–52
- Brantlinger E (1994) High-income and low-income adolescents’ views of special education. *J Adolesc Res* 9(3):384–407
- Brantlinger E (1997) Using ideology: cases of nonrecognition of the politics of research and practice in special education. *Rev Educ Res* 67(4):425–459
- Butler J (1992) Contingent foundations: feminism and the question of “postmodernism”. In: Butler J, Scott JW (eds) *Feminists theorize the political*. Routledge, New York, pp 3–21
- Carmine D (1987) A response to “false standards, a distorting and disintegrating effect on education, turning away from useful purposes, being inevitably unfulfilled, and remaining unrealistic and irrelevant”. *Remedial Spec Educ* 8(1):42–43

- Danforth S (1999) Pragmatism and the scientific validation of professional practice in American special education. *Disabil Soc* 14(6):733–752
- Danforth S (2006) From epistemology to democracy: pragmatism and the reorientation of disability research. *Remedial Spec Educ* 27(6):337–345
- Danforth S, Navarro V (2000) Hyper talk: sampling the social construction of ADHD in everyday language. *Anthropol Educ Q* 32(2):167–190
- Forness SR, Kavale KA (1987) Holistic inquiry and the scientific challenge in special education: a reply to Iano. *Remedial Spec Educ* 8(1):47–51
- Gallagher DJ (1998) The scientific knowledge base of special education: do we know what we think we know? *Except Child* 64(4):493–502
- Gallagher DJ (2001) Neutrality as a moral standpoint, conceptual confusion, and the full inclusion debate. *Disabil Soc* 16(5):637–654
- Gallagher DJ (2006) If not absolute objectivity, then what? A reply to Kauffman and Sasso. *Exceptionality* 14(2):91–107
- Gross PR, Levitt N (1998) Higher superstition: the academic left and its quarrels with science. Johns Hopkins University Press, Baltimore
- Gross PR, Levitt N, Lewis MW (eds) (1996) *The flight from science and reason*. Johns Hopkins University Press, Baltimore
- Heshusius L (1989) The Newtonian mechanistic paradigm, special education, and contours of alternatives: an overview. *J Learn Disabil* 22(7):403–415
- Heshusius L (2004) From creative discontent toward epistemological freedom in special education: reflections on a 25-year journey. In: Gallagher DJ (ed) *Challenging orthodoxy in special education: dissenting voices*. Love Publishing, Denver, pp 169–230
- Hodkinson PM (2013) The politics of legitimating research. In: Reid AD, Paul Hart E, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 407–415
- Iano RP (1986) The study and development of teaching: with implications for advancement of special education. *Remedial Spec Educ* 7(5):50–61
- Kauffman JM (1999) The role of science in behavioral disorders. *Behav Disord* 24(4):265–272
- Kauffman JM, Sasso GM (2006a) Toward ending cultural and cognitive relativism in special education. *Exceptionality* 14(2):65–90
- Kauffman JM, Sasso GM (2006b) Certainty, doubt, and the reduction of uncertainty. *Exceptionality* 14(2):109–120
- Kavale KA, Forness SR (2000) History, rhetoric, and reality: analysis of the inclusion debate. *Remedial Spec Educ* 21(5):279–296
- Licht BK, Torgesen JK (1989) Natural science approaches to questions of subjectivity. *J Learn Disabil* 22(7):418–419, 421
- Lincoln YS, Canella GS (2004) Dangerous discourses, methodological conservatism and governmental regimes of truth. *Qual Inq* 10(1):5–14
- Lloyd JW (1987) The art and science of research on teaching. *Remedial Spec Educ* 8(1):44–46
- Mostert MP, Kavale KA (2001) Evaluation of research for usable knowledge in behavioral disorders: ignoring the relevant, considering the germane. *Behav Disord* 27(1):53–68
- Mostert MP, Kavale KA, Kauffman JK (2008) Challenging the refusal of reasoning in special education. Love Publishing, Denver
- Poplin MS (1987) Self-imposed blindness: the scientific method in education. *Remedial Spec Educ* 8(1):31–37
- Rhodes WC, Sagor M (1975) Community perspectives. In: Hobbs N (ed) *Issues in the classification of children: a sourcebook on categories, labels, and their consequences*, vol I, The Jossey-Bass behavioral science series. Jossey-Bass Publishers, San Francisco, pp 101–129
- Sasso GM (2001) The retreat from inquiry and knowledge in special education. *J Spec Educ* 34(4):178–193
- Skrtic TM (1986) The crisis in special education knowledge: a perspective on perspective. *Focus Except Child* 18(7):1–16
- Sokal A, Bricmont J (1998) *Fashionable nonsense: postmodern intellectuals' abuse of science*. Picador, New York
- Taylor SJ (2006) Before it had a name: exploring the historical roots of disability studies in education. In: Danforth S, Gabel SL (eds) *Vital questions facing disability studies in education*. Peter Lang, New York, pp xiii–xxiii

Miriam Zukas

Abstract

This vignette takes the form of a fictional dialogue at a Masters in Clinical Education course team meeting whose members are facing the challenge of preparing students for ethical review of their proposed research. Depending on the focus of and context for their research, some students are required to submit research proposals to National Health Service ethics committees for their approval. The vignette explores through conversation the multiple perspectives within the team as to the warrant for research. By drawing loosely on examples from the field, it also considers the effect of ethical approval procedures on what is and is not legitimate educational research.

Keywords

Clinical education • Research legitimacy • Research politics • Qualitative research • Ethical approval procedures

The invitation to provide a vignette, case or commentary suggests that there is freedom in this volume to experiment with genres. The ‘fictional’¹ course team meeting outlined here happens in the near future. The course team includes academics from education, healthcare and medicine. They contribute to a Masters in Clinical Education, intended for nurses, doctors, pharmacists and other healthcare professionals who are, as part (or all) of their role, involved in the education of trainee healthcare workers. The part-time course entails an intensive engagement with education which, as a field of study, is unfamiliar to most course

participants. Therefore, alongside the ‘content’ of the programme, the course includes explicit development of critique and argument through reading and writing in the social sciences, familiarisation with different paradigms of social science research, and extensive discussions about the implications of different paradigmatic understandings for judgements about the quality of educational research. Towards the end of the second year of their Masters, course participants work with a supervisor to develop a proposal for a critical study which is usually a piece of empirical educational research, based on some aspect of their own practice. They spend their third and final year conducting the research and writing it up.

In the interchange below, the protagonists are Nick, the course director whose background straddles healthcare and education; Anne, a professor in education; James, a healthcare researcher specialising in qualitative approaches; Sue, an academic in education; and Clare, a senior healthcare academic who has also been involved in many ethics committee meetings.

Nick: I’ve put ethics on the agenda again. We’ve got a terrible problem and none of our students are going to finish in time, unless we resolve it.

Clare: What’s the problem?

¹ With apologies to the ‘real’ course team: the individual characters are fictional but the course and the various views expressed are not. Following many other educational researchers (e.g. Clough 2002; Sparkes 2002, 2007), I drew on informal conversations with colleagues and course participants, encounters with research ethics forms, procedures and committees, staff development sessions and formal course meetings to develop this fictional account of a course meeting.

M. Zukas (✉)
School of Social Sciences, History and Philosophy, Birkbeck,
University of London, London, UK
e-mail: m.zukas@bbk.ac.uk

Nick: As you know, if the course participant wants to carry out research with colleagues or students who are working in the NHS, they have to go through the NHS REC system.² It's just a nightmare, so many steps are involved before the form even gets to the REC. The electronic REC standard form has about 75 questions on it and, even though most are aimed at studies involving medical interventions, you still have to answer them; then you have to get your supervisor to act as principal investigator even though they're not; and then there's a whole business to find sponsorship from some bit of the University that's not even involved with the course.

Clare: How long is this taking?

Nick: At least six weeks; and if the participant wants the supervisor to look at a draft of the submission — which they ought to do, particularly as the rules say that the supervisor is the principal investigator — that can add even more time.

Sue: Well, at least they'll get it properly reviewed for ethics.

Nick: That's what I'm most worried about. We keep having participants rejected by RECs.

Clare: Why?

James: There seems to be a pattern to it. First, although there are boxes to tick to say that this is a piece of qualitative research, it seems that committees have particular views about qualitative research. They are keen to ensure that research procedures are objective and free from bias, which is fair enough; but then they want the work to be generalisable so their feedback often makes 'suggestions' for participants to change their methodologies. These 'suggestions' are really instructions because if you don't respond to them, you won't get through.

And second, they are worried about power issues — for example, that research participants might be coerced into taking part, or might be damaged or upset in some way. So they spend a lot of time requiring participants to develop more and more complicated back-up strategies like giving phone numbers for counsellors. Or they just reject the proposal out of hand.

Sue: How many people are on the committee and what are their backgrounds?

Clare: The committees vary, but in general, there seem to be at least twenty, at least a third of whom are lay. The rest seem to have clinical backgrounds. I don't think there are many education people.

Sue: Oh well, maybe some of the educationalists ought to try and get on the committees by volunteering to be lay members and we can sort it out that way.

Clare: That sounds like a pragmatic and sensible response but it won't work. Our course participants come from a number of NHS trusts (healthcare organisations) and each has at least one REC. We'd spend our lives at these meetings and in any case wouldn't we just be biased about our own proposals? I want to go back to what you see as the main problems. Surely we do want research procedures to be objective and free from bias. If the REC can help with that, we ought to be encouraging our participants to take advice.

Anne: I don't think it's possible to judge educational research on the basis of objectivity and freedom from bias. For example, I do not leave my feminism at the door of my research — it informs the kinds of questions I ask and the issues I focus on. It's integrated into the decisions I make about the ways in which I do research, and it's part of the lens through which I come to analyse and interpret research data. Others might disagree with my position — but they will hold positions just as dear to them. In my view, the assumption that educational researchers can separate themselves from what they study is just misguided.

Clare: Are you saying that research is political? Are you saying that course participants shouldn't try and be objective when it comes to research?

Anne: Yes — I'm trying to say that, from where I stand, it is much better to recognise researchers' understandings as always partial, always coming from somewhere.

James: Well, I don't entirely agree. I think qualitative research should be as objective as we can make it. The problem for me is that the majority of REC members work within a different paradigm. They are interested in questions of cause and effect, rather than understanding a phenomenon. They want generalisable findings and that's not what qualitative research is about.

Anne: We're agreed on the pointlessness of seeking generalisability. But I just don't agree that it's possible to do 'objective' research. However, I wouldn't stop you even if I think it's a misguided ambition. I do understand that this is one — but only one — way of judging research. As for politics, of course research is political.

James: Okay, I do agree with you that research — or more accurately its legitimisation — is political. Why do you think the whole REC process was set up in the first place? It was a political response to a number of scandals in medical research. It was and is about managing institutional and reputational risk.³ That's why we need to convince them that qualitative research is legitimate.

²The National Health Service Research Ethics Committees (NHS RECs) are governed by the Research Governance Framework for Health and Social Care. Available online at <https://www.gov.uk/government/publications/research-governance-framework-for-health-and-social-care-second-edition>

³See Dixon-Woods and Ashcroft (2008) for an analysis of the circumstances in which the regulation and governance of medical research arose, and its ongoing relationship with risk and trust.

Anne: I think that the REC is involved in a political process which has serious consequences for our course. If it excludes certain kinds of research such as feminist or action research, or research from an interpretative perspective, I think it compromises the course, the participants and me as an educational researcher.

Clare: Don't you think you two are being a bit precious about research? After all, our participants have scientific backgrounds and they can apply this knowledge to their educational projects.

James: Well, researching learning, or pedagogy, or curriculum is not the same as finding out if one drug works better than another. I don't think educational research should be looking for magic bullets — sorry, that's the wrong metaphor. Educational processes are far too complex to be looking for the impact of one intervention rather than another, we can't generalise in that way.

Nick: Okay, that's enough, we've rehearsed these arguments before. But we have to think of our course participant. Maybe we have to find ways of playing the game, of responding to the REC demands so that at least their proposals get ethical approval.

Sue: I agree. We just need to get on with it. You said there was another problem with the committee didn't you?

Nick: Yes, committee members are really worried about course participants researching students or colleagues. We've had three cases where proposals have been rejected because of this.

Sue: What are the dangers?

James: I honestly don't know provided you've taken precautions to try and deal with power issues. In one case, the person undertaking the study was the director of her programme. She had no direct contacts with the students she wanted to talk to and she didn't mark their work, but her research was still seen by the REC as a problem, because she was researching her own organisation, even though she'd done her best not to contaminate the data. That's because they don't really understand qualitative research.

Anne: I've had a case where the participant wanted to run a focus group with his colleagues so that they could explore a particularly challenging teaching issue; the REC wanted him to get somebody else to run the focus group because his colleagues might not want to upset him by telling the 'truth'. In another case, they wanted the course participant to carry out the study in another setting altogether where knowledge of students or teachers did not 'contaminate' data collection, but the whole point was the course participant wanted to research his own context.

Sue: Aren't these sensible suggestions?

Anne: I think they are just nonsense. Apart from the fact that the participants had made every effort to spell out the process by which they would ensure voluntary participation, I think the REC again comes from a specific view of what research is.

I hate the implicit distrust of both researchers and participants, and I know they'll suggest that they need to oversee things to 'protect' the participants. Aren't these people grown-ups who can make up their own minds?

James: Now I do agree with you about that. Did you read that study where the researchers asked REC committee members to respond anonymously to a written questionnaire? The researchers had discussed the issue at a research committee meeting and decided not to go through an NHS ethics committee because the study was entirely voluntary and anonymous and didn't even involve trainee doctors.⁴ Presumably, if the recipients didn't want to respond, they didn't fill in the questionnaire. But four of the respondents complained because the researchers hadn't obtained ethical approval from a committee — and yet three still filled in the questionnaire! What muddled thinking is going on here? The arguments aren't about ethics: they're about politics and organisational risk management.

Sue: But you are ignoring the fact that researchers who are teachers have power over the students they're researching.

Anne: Of course the researcher-researched relationship involves power, what relationship doesn't? But does that inevitably mean power over someone? Haven't we learnt anything from feminist and other research about understanding power as operating in many more subtle ways? It seems so ironic that ethics committees see themselves as defending the 'powerless' whilst, at the same time, they exert their institutional power to exclude certain kinds of research. Surely we have to get a sense of proportion here, and recognise that, whilst ethics are an important issue, this kind of carry-on just blocks certain kinds of research, rather than helping new researchers to find ways through complex issues?

Sue: Okay. I've got a solution. The University's just introduced a new REC system of its own. That has to be better. Why don't we try and use that instead?

Nick: Well, we can't if the study involves NHS staff and they're recruited as potential research participants by virtue of their professional role,⁵ or if we use NHS premises or facilities. That's probably three-quarters of our participants. The other quarter could go through the new University system, but have you seen the form?

James: I have, it's just a modified REC form for the whole university which has been piloted in engineering. What a nonsense for those in the social sciences! The poor person filling in the form has to answer fewer questions, but it's still the same underlying set of assumptions that research is really supposed to be generalisable.

⁴ Brown et al. (2007).

⁵ The Research Governance Framework for Health and Social Care (2005), Department of Health. See footnote 2.

Anne: Perhaps university committees will be more understanding about different research paradigms, but I suspect that the ethics issues will quickly be overshadowed by arguments about bias and objectivity.

Nick: Well, I think we've got two choices. Either we only allow certain kinds of research proposals to go forward, so course participants don't waste their time filling in forms and getting rejected; or we rewrite the programme so they don't do any research in the Masters.

Clare: I certainly wouldn't favour the latter. We are a research-led University and this is a Masters course — we have to have people graduating who can do educational research. Our job as supervisors is to help them satisfy the ethical requirements and if that means doing what the RECs or research committees expect, then that's what we need to do. I favour keeping with the RECs because it's important that our course participants' work is recognised by their clinical colleagues.

James: Well, I don't think we can call ourselves educators if our students aren't able to undertake qualitative research if they want to.

Nick: Okay, so then we'll have to train them to do it properly and run a session on our next unit on avoiding bias in qualitative research, when could you do that James?

Note on Contributor

Miriam Zukas is Executive Dean of Social Science, History and Philosophy at Birkbeck, University of London and Professor of Adult Education. She was previously Director of the Lifelong Learning Institute at the University of Leeds and worked with Phil Hodgkinson as a co-tutor on a Masters module, *Researching Lifelong Learning*. She is still a member of the Clinical Education course team and researches doctors' workplace learning.

References

- Brown J, Ryland I, Howard J, Shaw N (2007) Views of National Health Service (NHS) Ethics Committee members on how education research should be reviewed. *Med Teach* 29(2):225–230
- Clough P (2002) Narratives and fictions in educational research. Open University Press, Buckingham
- Department of Health (2005) Research governance framework for health and social care, 2nd edn. Department of Health, London
- Dixon-Woods M, Ashcroft RE (2008) Regulation and the social licence for medical research. *Med Health Care Philos* 11(4):381–391
- Sparkes A (2002) Telling tales in sport and physical activity. Human Kinetics, Champaign
- Sparkes A (2007) Embodiment, academics, and the audit culture: a story seeking consideration. *Qual Res* 7(4):521–550

David Scott

Abstract

This chapter examines those criteria that are used and potentially could be used for assessing the worth of educational research. In the first instance, these are epistemic or internal criteria, and their application necessarily entails evaluating the strength and type of evidence used to support educational hypotheses. It also comprises an evaluation of the background theory which underpins the worth of a piece of evidence. The application of internal criteria is only one way of judging educational research, for example, a range of external and parasitic criteria have been proposed. The issue of the relationship between internal and external criteria therefore becomes salient; as does the possibility of producing lists of criteria for judging worth.

Keywords

Criterial judgements • Knowledge • Educational research • Evidence in judgement • Epistemology

Introduction

In this chapter I will examine those criteria that are used and potentially could be used for assessing the worth of educational research. In the first instance, these are epistemic or internal criteria, and their application necessarily entails evaluating the strength and type of evidence used to support educational hypotheses. It also comprises an evaluation of the background theory which underpins the worth of a piece of evidence. The application of internal criteria is only one way of judging educational research, for example, Furlong and Oancea (2005) have proposed a number of external criteria. The issue of the relationship between internal and external criteria therefore becomes salient; as does the possibility of producing lists of criteria for judging worth.

I will argue in this chapter that all the various criteria which have been identified, i.e. validity, credibility,

plausibility, relevance, simplicity, transparency, trustworthiness, sufficiency of evidence, sufficiency of process of evidence-gathering, capacity-development, practice-development, impact, accessibility, theory-development, and systematicity, are specific to particular epistemic and ontological positions, and further to this, advocates for a multi-criterial approach still have to address the issue of the relationship between them or the different values that can be given to each. The issue of whether it is possible, within the limits of language, to develop lists of evaluative criteria or even whether it is possible to judge between different views of knowledge is thus central to the argument being made here.

Internal and External Criteria

A wide range of criteria and criterial systems have been conceived. For example, Furlong and Oancea (2005) suggest in relation to applied educational research that there are four inter-related and inter-dependent dimensions of quality: epistemic, technological, capacity development and value for

D. Scott (✉)
Department of Curriculum, Pedagogy and Assessment,
Institute of Education, University of London, London, UK
e-mail: D.Scott@ioe.ac.uk

people, and economic. Within each of these dimensions, they suggest a number of sub-dimensions; so, the epistemic dimension comprises: trustworthiness, capacity for making a contribution to knowledge, explicitness, propriety and paradigm-dependence. The technological dimension comprises: purposivity, salience or timeliness, specificity and accessibility, a concern for enabling impact, and flexibility and operationalisability. The capacity development dimension requires the piece of work being judged to be plausible, collaborative, reflexive or deliberative, receptive and/or transformational. And finally, the economic dimension comprises marketability, cost-effectiveness, auditability, feasibility and originality. The implication of their argument is that for a piece of work to be judged to have reached a threshold of excellence, it should meet the requirements of these dimensions and sub-dimensions, or at least that when a judgement is being made, these criteria, translated into standards, should be central to the way the judgement is made.

In a similar fashion, the UK Research Assessment Panel for Education has identified three criteria for judging the worth of research texts, and thus by implication the research they report: originality: 'the development of innovative designs, methods and methodologies, analytical models or theories and concepts' (HEFCE 2007, p. 13); significance: 'research has, or has the potential to have, considerable significance if it breaks new theoretical or methodological ground, provides new social science knowledge or tackles important practical, current problems, and provides trustworthy results in some field of education' (*ibid.*); and rigour: 'methodological and theoretical robustness and the use of a systematic approach' (*ibid.*).

A number of other criterial sets have been developed to allow researchers and readers of research to determine the quality of research texts. Classical sets of criteria referred to the representativeness of the account. An account therefore was judged in terms of: its internal validity (whether experimentally the effects observed as a result of the intervention were actually caused by it and not by something else); external validity (whether findings from the case being investigated could be generalised to other cases in time and place); and objectivity (whether the preconceptions and biases of the researcher had been accounted for in the construction of the account and eliminated as influencing variables). Guba and Lincoln (1985, 1989), Hammersley (1992, 2005a, b) and Evers and Lakomski (1991) have suggested different sets of criteria, based on different epistemic commitments.

Types of Judgement

A fundamental distinction can be drawn between these different criteria and this relates to their internality or externality. Internality refers to the quality of the piece, with the

focus on validity, sufficiency of evidence, sufficiency of process of evidence-gathering or systematicity, which in turn is validated by inter-subjective judgements within a particular discourse community, or by judgements made by individuals who subscribe to the values of a discourse community. However, whether subjectively or inter-subjectively validated, the focus is not on the impact it makes on that community or any other community, but on the quality of the piece; internal criteria are epistemically-focused. External criteria, on the other hand, refer to the impact of the piece, so it is judged to be sound if it can be shown to have made an impact on an agent or agency in the world. A single external criterion may be deemed to be necessary, though not sufficient, for making a judgement about the quality of the piece; especially if a multi-criterial approach is adopted. Examples of external criteria are capacity development and value for people, cost-effectiveness, marketability and competitiveness (Furlong and Oancea 2005). The reason for distinguishing between these two types of criteria is that a piece of work can be internally sound, but have made no impact, and conversely, a piece of work can be internally flawed, but may still have made an impact, either positively or negatively, on a discourse community. Two examples of the latter are systematic reviewing processes (Harden and Thomas 2005) and Tooley with Darby (1998), which in both cases have been criticised for internal flaws (*cf.* MacLure 2005; Strathern 2000; Stronach 2004; Hammersley 2001), but it would still be accepted that they have had an impact on other discourse communities and ultimately on the discourse community within which they are embedded.

A criterial judgement is considered to be sound if it satisfies the requirements for that judgement to be made. In order for a piece to be judged to have met the requirements of systematicity, for example, it must have conformed to a model of what systematicity means to the person making the judgement, and this comprises two processes: first, that the criterion is adequately defined, and second, that this general definition is applied to the particularity of the piece in a satisfactory way, so that this piece in part or in its entirety is an adequate example of the criterion. A criterion then is a statement about the quality of a piece or any future piece, and implicit within it is a model of what constitutes sufficient evidence for a judgement to be made that it conforms to the criterion, and evidence in the particular example being considered here (systematicity) refers to the structure of the piece, whether it shows to the reader that the argument made is consistent and so forth. The reader, who is making the judgement that it is sound, has to have found good reasons or evidence as to why it meets those requirements. The reader may also have looked for evidence that the piece has not met the criterial requirements; in other words, they are looking for evidence or examples of places within the text which would indicate that the satisfiers for the criterion have not been met. If they find a sufficient number of examples where the author

has not adopted a consistent approach, then they are likely to judge that it has failed to meet these satisfiers. Thus, moments of positive affirmation and negative disconfirmation are implicit within the process.

Furthermore, as Hammersley (2005a) makes clear, if a piece of work is to be judged by a list of criteria rather than a single criterion, then two conditions have to be met. Firstly, the relationships between these criteria have to be clarified. Are they for instance in a hierarchical relationship to each other? Do they have different values attached to them? If they do, are these implicit or explicit? And secondly, the application of criteria still requires an interpretive process to be undertaken by an assessor or assessors, and this involves the surfacing of background knowledge and the reaching of agreement between those assessors. This reaching of agreement is fraught with difficulties, especially if the discourse community is fractured or consists, to use Bernstein's (2000, p. 67) phrase, of 'a variety of specialised languages'.

However, it is not a question of abandoning one set (e.g. internal criteria) at the expense of another (e.g. external criteria), but of deciding on the relative value of each. This is inherently problematic; firstly, because different types of research may have different purposes and thus to give a low value to a piece which is designed to have no practical or instrumental purpose would be unfairly to discriminate against it. (A particular mechanism such as the Research Assessment Exercise in the UK may of course have this as its intention; that is, research which can show an immediate form of impact is rewarded at the expense of a piece which cannot show this.) The second reason is that a further justification, which is further to the individual justification for each criterion, has to be provided and this relates to why one criterion should be given a higher or lower value than another, and this applies even if all the designated criteria are given equal values. In the process of identifying these criteria, an implicit value is given to each and this value is relative to values that could be given to other criteria within the set, and in turn, these relative valuations need to be justified. Assessors thus need a meta-theory that provides a rationale for the values given to the different criteria.

Assessors make judgements about quality; though the background to their judgements may be implicit. What is the origin of their judgement? They may have had experience of performing the same action before, and though their understanding of what is involved may have changed over time, it has been influenced by previous encounters with the same problem. They may in the past have had their view moderated by examples of other people performing similar actions to their own and they have assimilated these experiences into their repertoire of beliefs, leading to certain well-rehearsed practices/actions. Knowledge in judgement is still tacit, even if at various points in time that tacit knowledge has been surfaced for reflection and contemplation and amended

accordingly. They have a model of what good research looks like when they make a judgement, and in part they match up the piece under scrutiny with this model. There may, however, be a further process at work, which is that because they are aware that there are a number of different and conflicting ways of making a judgement about a piece of research, they suspend their own set of beliefs and judge the work to be sound if it conforms to the collective judgement of the discourse community in which they work, as they understand it.

Reaching agreement between assessors may also be problematic. Judgemental criteria, if made explicit, have to be framed so that any group of assessors would understand and use the concepts embedded in these criteria in the same way. It is not possible to focus exclusively on the results of such assessment processes because there may be a variety of reasons as to why agreement is reached. For example, assessors do not refer to the stated criteria but use their tacit knowledge of the problem to make their individual judgements and these happen to be in agreement. A second possible explanation for agreement being reached is that during the process of reaching agreement, the group of assessors adjust their understanding either of tacit criteria that they are using or of the written criteria that they are meant to be using so that they reach an agreement about the meaning of the criteria and the way they should be used, and then apply them. A third explanation is that the group of assessors are constrained by the power dynamics of the setting and readily agree to another person's judgement on the basis that that person is more knowledgeable or experienced, or that it is in their best interests to stifle their own opinions and agree with them.

These however, are possible cases and do not reflect all possible cases, one of which is that tacit knowledge is marginalised, the criteria are so framed that unequivocal agreement can be reached and stratified power relations are not implicated in the judgements that are subsequently made. Such criteria and the processes attached to their application can therefore potentially provide sufficient reasons for making the claim that a proper judgement has been made about an object, text or piece of research.

Evidence in Judgement

All judgements about educational matters are inferential; that is, evidence is collected and a conclusion is drawn from that piece of evidence or evidential set. In making a judgement about a piece of research in relation to a set of criteria, or in taking part in a collective process of judgement-making, evidence is investigated. However, the relationship between evidence and judgement is complicated. That evidence or evidential set has either a strong or

a weak warrant, and is domain-specific: what kinds of information will serve as supporting facts in making a claim is dependent on the practice within which it is embedded. Thus, evidence may not relate to the claim being made for one of four reasons: domain incommensurability; non-conformity to the grammar (logical and semantic) of the domain; the weak probative force of the evidence; or the incompleteness of the evidence-base. Claims then are domain-specific, so one set of practices or a domain requires a different type of evidence base than another.

In making a judgement about a piece of research using a set of criteria, the issue of fallibilism is salient, both as it relates to the judgement made by the assessor and also as it relates to the use of evidence by the researcher to support their hypotheses. This is because in making a judgement, true belief (that x is better than y , where x and y refer to different pieces of work) may consist of an acceptance that a weak form of evidence to support the hypothesis that is being made and/or a weak relationship between evidence and hypothesis is all that is required. In this case, knowledge is fallible; however, it may still be acceptable either to the reader or user of research or to the discourse community in which they work. Thus when a judgement is made that a piece of research is relevant, plausible, transparent or whatever, no assumption is being made that it is perfectly plausible, transparent or relevant. It is accepted that it meets some but not all the requirements of these criteria.

Fundamentally then, a judgement about knowledge has a background to it, and in part this reflects the degree to which research is considered to be fallible. A number of different types of fallibilism have been suggested. The first sense that can be given to fallibilism is where the individual believes that because they are positioned in relation to the external world, then their perspective is limited and thus the knowledge they produce is compromised, and incorrigible. A second type of fallibilism comprises the possibility of making mistakes which in theory could be corrected, and is therefore a corrigible version of fallibilism. A third type is a form of epistemic scepticism in that the individual holds that no true knowledge is possible because there are no convincing arguments to refute the possibility of being radically deceived. Again this type is incorrigible, because if it is accepted, there can be no possibility of correction. A fourth type reflects Popper's (2002) hypothesis that knowledge is produced through processes of conjecture and refutation, but this can never attain to a perfect form of knowledge. This is in effect an epistemological version of fallibilism, but is also ontologically-orientated since the changing and emergent nature of reality means that knowledge always lags behind its referent. Again, this is an incorrigible version of fallibilism because there is no possibility of ever keeping abreast with the way the world is currently structured. Epistemological fallibilism may also cast doubt as to whether the

various forms of logical relations between items are sufficiently robust to allow the production of perfect knowledge. The reason for distinguishing between these different forms of fallibilism is because they assign different values to corrigibility, and thus some demand a strong form of incorrigibility, others weaker ones. The application of epistemic criteria in judgement is therefore determined by the degree and type of fallibility underpinning the epistemology used by the researcher or researchers in making their knowledge claims.

There is a further dimension that needs to be considered and this refers to the nature of the evidence itself and in particular to the way it has been gathered; in other words, its implicit (usually) warrant. If the piece of evidence is contaminated by interests of one type or another then it may be considered to be unsound. However, at a foundational level, there may be disagreement about the possibility or otherwise of any evidence being produced that is not imbued with interest values of one type or another. If, for example, a Gadamerian perspective is adopted, then the soundness of evidence is judged by whether a sufficient acknowledgement of the background to the collection and presentation of the data is made (Gadamer 1989); in other words, there can be no value-free data or evidence that can be presented. This however, is treated not as sufficient for designating a piece of evidence as sound or unsound, but only as a necessary element of such a process.

A piece of evidence on its own may not be enough to confirm or falsify a belief that is held; since it may be that a concatenation of evidence is required to confirm or falsify a belief. Thus the problem arises as to the relationships between these different items of evidence. Again, more evidence of the same type merely gives the researcher greater confidence that they are correct to hold the belief that they in fact do hold. However, the belief that they have may not require more of the same type of evidence, because even if they collect many instances of the same type, this can never prove conclusively that they are correct to hold to that belief. It may be that different types of evidence are required to confirm or disconfirm that belief. Further, the strength of the evidence that leads the researcher to hold a belief is always undermined, that is, it becomes weaker, if alternative hypotheses generated from that data can be identified.

A more fundamental problem with the relationship between evidence and hypothesis may arise, and this is that if two individuals hold different background theories they are likely to disagree about the worth and strength of a piece of evidence in relation to the claim they are making, and the only way to settle this dispute is to evaluate the worth or otherwise of these competing background theories. This may be difficult because those theories comprise radically distinct views of the world. If sufficiency of evidence is identified as an epistemic criterion for judging the worth of

a piece, this cannot act as a neutral arbiter for assessors who may disagree fundamentally about the nature, quality, probative force and extent of that evidence.

Parasitic Criteria

There are a number of criteria which cannot be treated as criteria in their own right but are parasitic, that is, their value relates to the values given to first-order criteria, such as epistemic validity or impact on a discourse community or communities. For example, a piece of work can only be valued for its transparency if and only if what is being made transparent is epistemically sound. If what is being made transparent is flawed, then the attribute of transparency has no value. Three examples of these second-order criteria are: intentionality, transparency, and plausibility.

The first of these is intentionality. It has been suggested that the stated intention of the author or authors should be a necessary but not sufficient element in any judgement about worth that is made. A piece of work should in part be judged as to whether it conforms to its stated purposes. In this case, no overall judgement should be made as to its impact or to its internal validity, or even to the soundness or otherwise of those intentions, without at least some reference to the stated intentions of the author or authors, if and only if they can be safely understood. Thus, if the intention of the author is that it should have no impact, it may still meet the requirements for soundness in relation to this intentional criterion, because there is an intention behind the piece that acts as a satisfier for quality.

However, if we have good grounds for believing that the stated or implicit intention of the researcher is flawed, or even that, in all the possible cases that have come to our attention and all the possible cases that could come to our attention, there is the possibility that a researcher could have a misguided intention, then the inclusion of intentionality as one of our criteria is suspect. A criterion such as intentionality can only be used in this way if it has a close relationship with other epistemic criteria, such as truthfulness, validity or reliability. It is therefore a second-order concept. The assessor is being asked to make their judgement not in relation to whether the researcher has an intention but in relation to whether the intention or purpose of the piece being assessed is sound. Furthermore, this means that no value can be given to intentionality in a criterial set unless a further judgement is made that this intention is sound or reasonable, and this involves a further epistemic judgement about the background to the research being made.

A second example is the criterion of transparency, and in like fashion, we should understand it as a second-order concept, with it being parasitic on epistemic criteria. Thus a piece could be transparent about its intentions, purposes

and processes, but still be epistemically flawed. Some commentators have argued (cf. Hammersley 2007) that this test is too stringent and that, because different pieces have different purposes and intentions, we should frame the criterion so that it focuses on the process of making transparent those purposes, intentions and processes. However, this does not solve the problem, since transparency may be expressed or operationalised in different ways and this depends on the type of epistemology adopted by the author or authors.

For example, a critical ethnographer understands their work as positioned and therefore making transparent this positionality comprises processes of reflexivity and the reporting of that reflexivity in the account of their research. An experimentalist would argue that reflexivity and positionality are forms of bias to be eliminated, and would therefore understand transparency as the setting up of experimental structures in which bias is eliminated or limited. Within the experimentalist's account there is no attempt made to discuss positionality because it is not a part of the research design. We therefore have here two different accounts of what transparency is and it becomes impossible to separate out the transparency of the action from what it is that is being made transparent. Since transparency is a parasitic concept, it is only possible to use this criterion in making a judgement about quality after the making of a prior judgement about the background to the research.

A third example is plausibility. Hammersley (2005b), for example, suggests that plausibility could be a necessary but not sufficient criterion for making a criterial judgement. Plausibility has an undeniable referential element in that it is relative to a person or group of people with different interests and who work perhaps in different discourse communities. So, what is plausible to a practitioner may not be plausible to a researcher. The term is an overarching concept which means that the burden of acceptability is placed on the person or persons who are making the judgement and in relation to their particular interests or sets of interests. A piece of research is plausible to a practitioner if it both makes reference to problems encountered in situ and provides possible solutions to problems encountered in situ. Epistemic concerns are therefore de-emphasised, except in so far as a truth criterion is being invoked by the practitioner as to its usefulness.

Plausibility for a policy-maker has a different meaning, in so far as practical interests relating to the construction, dissemination and implementation of policy is the guiding interest, and again the truth criterion invoked is how useful it is in terms of the furtherance of these interests. Plausibility for a researcher may involve grounding judgements made about research in the collective judgement, as it understood by the researcher, of the research discourse community, and this may involve a judgement about the political orientation of that community. Plausibility is not in itself an internal

criterion for judging a piece of research, but only a way of anchoring the use of such criteria in judgements made by users of various types. Plausibility is relative to an external agent or agency or to a group of agents or agencies. If it is used as a criterion by an assessor for judging the quality of a piece of work, then, either it becomes redundant because the assessor in making a judgement about quality has to by virtue of what they doing make a plausible judgement or the assessor has to make a further judgement about external-ity or impact, that is, as to whether a group of users find it plausible or not. This further judgement requires the collection and evaluation of evidence about whether a user group has or has not found the piece to be plausible, and thus epistemic criteria are once again invoked, though in this case, those epistemic criteria relate to the way a piece has been received and not to the piece itself.

External Criteria

A piece of work can be internally sound, that is, it represents the world adequately; however, it still may not be adequate at the level of external satisfaction. For example, it may not be useful, it may not have had any impact, and it may not have contributed to the development of the research community or to any capacity within it. It is internally sound in the sense that it is epistemically valid. The assessor in using external criteria in judgement is switching their attention from the original account, and focusing on a different problem; that of the impact of that account in different discourse communities, and this requires a different range and type of evidence to be collected to determine whether it is adequate or not. As I have suggested above, this still requires the use of epistemic criteria though these are now being invoked to determine the adequacy of a different operation. Two examples of external criteria are capacity-development and value for people, though Furlong and Oancea (2005) identify a range of such criteria. All of them, however, have this same property.

The first of these examples is capacity-development. Furlong and Oancea (2005), for example, argue that research has a value in enhancing the capacity of the practitioner to develop their practical wisdom in the workplace. They make three points about this: first, that much of the knowledge which underpins practical wisdom is tacit; second, that it can compensate for the situatedness of the practitioner in the workplace setting by acknowledging the ethical dimension of human encounters; third, it involves self-reflection and allows critical collaboration. This is an external justification for research in that the burden of proof for whether the research is adequate or inadequate is located in the reader or user of research, and the assessor is therefore making a judgement about the actions of these readers or users.

A further issue that needs to be addressed is the probative force of the conclusions made by the research. If a researcher makes a theoretical claim about an educational matter, he or she is also claiming that that theory is a better theory for explaining all the available evidence than all other possible theories, and the truth claim embedded here would compel the practitioner to modify their practice if and only if it was relevant to that practice. To do otherwise would be to base their practice on custom and experience rather than on the prescriptive force of research findings. However, much research does not make the claim that it has an absolute view of truth, but rather badges its findings as helpful guidance or lacking in contextual detail or as tentative, and therefore deliberately does not make the claim that it should be accepted as a complete truth about the matter in hand. In this case, an acknowledgement is being made that the exercise of practical wisdom involves selecting from all the available evidence. This doesn't mean that the practitioner ignores the evidence and does what they feel was right all along, but it does mean that evidence and hypothesizing are treated here as strictly non-determinative.

If research is to be judged by this criterion, then a value has to be given to it, and this value is relative to the weightings given to other criteria and in particular to internal criteria. It might therefore be a necessary satisfier for quality, in that it enhances, or has the potential to enhance, the practical wisdom of the reader or user, but it is clearly not a sufficient satisfier. And this is because poor research judged by internal standards – if it is accepted that internal standards are a necessary part of judgements that can be made about research – would lead to a reduction in the practical wisdom of the practitioner. And this is so regardless of whether the research is external to the practice setting or conducted by practitioners themselves.

A more generic form of capacity-building is that research accounts should be judged as to whether they give value to people, and this provides us with a second example of an external criterion. Furlong and Oancea (2005) suggest that if research can be shown to have the capacity to produce certain virtuous actions in the user, for example, the capacity to reflect and criticise, then it is deemed to have value. (They also identify a number of other dimensions relating to value for people: partnership, collaboration and engagement, plausibility, receptiveness, and transformation and personal growth.)

However, the identification of such virtues is not without difficulty. First, a causal relationship (R_1) has to be established between the reading of the research and certain actions resulting from it, which in its turn would result in another text and another set of actions (R_2), which would in its turn require a new piece of research to be undertaken to establish a causal relationship between text and actions (R_3) and so forth – we have here a potentially

infinite sequence. Second, this sequence of $R_1, R_2, R_3 \dots$ requires the identification of these virtues, i.e. ‘expansion of control over acting opportunities’ (Furlong and Oancea 2005, p. 14), and this would require the assessor to verify whether this was so or not, and then make a judgement as to whether this knowledge was sound and reliable; and this in turn would involve the assessor in making an epistemic judgement, not about the research account itself but about the impact of that account on a selected group of people. Further to this, there is a time element, noted by Hammersley (2005b), in that much research does not have immediate consequences, so these traces may not show up as a capacity to perform certain actions in the present.

Concluding Remarks

This chapter has attempted to distinguish between three different types of educational criteria for judging the worth of research texts. The first is where an epistemic judgement is made about the research report. The second is where a judgement is made about the impact of the piece, so that it is judged to have reached an acceptable level of excellence if regardless of whether it is epistemically sound, it has influenced an agent or group of agents so that the external research community or the educational policy community or the practitioner community are now better able to act in their worlds. The third type of criteria is parasitic on these first-order criteria, so that, for example, a piece of work is judged to have reached a threshold of acceptability if, in the first instance, it is epistemically sound, and then, only if it has met this requirement, can it further be considered to have met a second-order requirement.

I have argued that the application of a criterion has a background, and that this needs to be articulated if a judgement is to be made about its viability. Thus, debates about which criteria are useful, and how each should be valued if a multi-criterial approach is adopted, can only be resolved at epistemic and ontic levels. All too frequently, attempts are made to resolve such issues at the criterial level without reference to underlying concerns about knowledge, reality and methodology. I have not addressed in this chapter the issue of how to resolve these epistemic disputes, but have adopted an “underlabourer” position of clarification and explanation.

Note on Contributor

David Scott is Professor of Curriculum, Pedagogy and Assessment at the Institute of Education, University of London. Recent research projects include: *Assessment for*

Learning; National Curriculum Standards and Structures in Mexico; India Capacity Building to the Elementary Education Programme; and Transitions to Higher Education Study. He has been Editor of *The Curriculum Journal* 1995–2000, and is Series Editor for *International Perspectives on the Curriculum*. His two most recent books are *Education, Epistemology and Critical Realism* (2010) and *Critical Essays on Major Curriculum Theorists* (2008).

References

- Bernstein B (2000) *Pedagogy, symbolic control and identity: theory, research, critique*, revised edn. Rowman and Littlefield, Lanham
- Evers C, Lakomski G (1991) *Knowing educational administration*. Pergamon Press, Oxford
- Furlong J, Oancea A (2005) *Assessing quality in applied and practice-based research: a framework for discussion*. Oxford University Department of Educational Studies, Oxford
- Gadamer H-G (1989) *Truth and method*, 2nd revised edn (trans: Weinsheimer J, Marshall DG). Crossroad, New York
- Guba E, Lincoln Y (1985) *Naturalistic enquiry*. Sage, London
- Guba E, Lincoln Y (1989) *Fourth generation evaluation*. Sage, Newbury Park
- Hammersley M (1992) *What’s wrong with ethnography?* Routledge, London
- Hammersley M (2001) On systematic reviews of research literatures: a narrative response to Evans and Benefield. *Br Educ Res J* 27(5):543–554
- Hammersley M (2005a) *Assessing quality in qualitative research*. Paper for a seminar on assessing quality in case study and qualitative research, July, ESRC TLRP seminar series on quality in educational research, Birmingham
- Hammersley M (2005b) *Methodological disagreement and the problem of quality*. Paper for a seminar on assessing quality in case study and qualitative research, July, ESRC TLRP seminar series on quality in educational research, Birmingham
- Hammersley M (2007) The issue of quality in qualitative research. *Int J Res Method Educ* 30(3):287–305
- Harden A, Thomas J (2005) *Methodological issues in combining diverse study types in systematic reviews*. *Int J Soc Res Methodol* 8(3):257–271
- HEFCE (Higher Education Funding Council for England) (2007) *Research assessment exercise education panel assessment criteria*. HEFCE, Swindon
- MacLure M (2005) “Clarity bordering on stupidity”: where’s the quality in systematic review. *J Educ Policy* 20(4):393–416
- Popper K (2002) *Conjectures and refutations: the growth of scientific knowledge*, 5th edn. Routledge, London
- Strathern M (2000) The tyranny of transparency. *Br Educ Res J* 26(3):309–321
- Stronach I (2004) *Deconstructing “quality” and reconstructing critique*. Paper presented at the British Educational Research Association, Manchester, 2004
- Tooley J, Darby D (1998) *Educational research – a critique: a survey of published educational research*. Office for Standards in Education, London

Terence Karran

Abstract

As noted by Scott, during the past decade, following the lead of moves in the USA and UK, national governments have scrutinised more closely the cost effectiveness and impact of research funding within higher education. Direct criticism of the overall quality of educational research has emerged, particularly in terms of its scientific rigour, its utility for practitioners, and the manner in which it is assessed. This contribution to the Companion explores the reasons why the quality of educational research has come to be so questioned, and examines a key discussion framework for assessing quality that has emerged from this debate. It then considers the merits of possible internal and external criteria for the worth of educational research, and the links between these criterial sets and the function and purpose of qualitative and quantitative approaches to educational research. Finally, the question of whether educational research is an art or a science is addressed.

Keywords

Educational • Research • Quality • Criteria • Impact

Introduction

Over the last decade, criticisms have been voiced, both in government and academia, about the overall quality and level of excellence of research into education, and how such research is to be assessed. Educational research has been accused of being of low quality, more especially when compared with other disciplines like medicine, and hence of negligible value either to policy makers or to practitioners in the teaching profession. Additionally, educational researchers have been dismissed as being a partisan and narcissistic community, content with disseminating their arcane research findings to each other via obscure academic journals. For example, in 2000, David Blunkett, then the UK government minister responsible for education, had argued that “We need to be able to rely on . . . social scientists to tell

us what works and why and what types of policy initiatives are likely to be most effective” and that “issues for research are too supplier-driven rather than focussing on the key issues of concern to policy-makers, practitioners and the public at large” (Blunkett 2000). Moreover, while giving evidence to the House of Commons Education and Skills Committee in 2003, Sir Howard Newby, the (then) Chief Executive of the Higher Education Funding Council for England and a former university Vice Chancellor, remarked:

education in this country on the whole has a problem with the quality of the research, not with the amount of it. . . . It (i.e. education research) is not as good as it might be and I speak as a former Chairman of the Economic and Social Research Council.

Similarly, in the USA, Shavelson and Towne’s (2002) assessment of scientific research in education undertaken for the National Research Council, reported on:

the widespread perception that research in education has not produced the kind of cumulative knowledge garnered from other scientific endeavours. . . . The prevailing view is that findings in education research studies are of low quality and are endlessly contested. (p. 28)

T. Karran (✉)
Centre for Educational Research and Development,
University of Lincoln, Lincoln, UK
e-mail: terencek@lincoln.ac.uk

Similar concerns have also been expressed following reviews in (*inter alia*) Australia (McGaw et al. 1992) and France (Prost 2001) which would suggest that such criticisms are widespread.

Criticisms of the quality of educational research from within academia have been just as (if not more) trenchant. For example, Michael Bassey (1993), who was President of the British Educational Research Association and a member of the Educational Panel during the national Research Assessment Exercise of UK universities in 1992, commented on his experience of the latter thus:

I am less certain that much of the research reported in the literature does extend theory, or illuminate policy, or improve practice in significant ways. I have a strong impression of individualism, of researchers working in isolation from each other, dabbling in an amateurish way at issues which are too big to be tackled by lone researchers. I consider that much educational research is in a dilettante tradition that looks like a game of trivial pursuits. (p. 6)

Similarly, Kaestle's examination of the role of US federal funding for educational research over 25 years caused him to pose the question, "Why is the reputation of education research so awful?" and he found that educational researchers had a "reputation for irrelevance, politicization, and disarray" (1993, p. 30). In addition to the apparently poor quality of educational research, commentators also noted that educational research rarely, if ever, had any utility for policy-makers or teaching practitioners. Moreover in the UK, an analysis by Hillage et al. (1998, p. xi) of research which was relevant to practitioners and policy makers found that:

Where the research does address policy-relevant and practical issues it tends to:

- be small scale and fails to generate findings that are reliable and generalisable;
- be insufficiently based on existing knowledge and therefore capable of advancing understanding;
- be presented in a form or medium which is largely inaccessible to a non-academic audience; and
- lack interpretation for a policy-making or practitioner audience.

Helpfully, Pring (2000a, p. 496) provides a succinct summary of the shortcomings of educational research which are, he suggests, fourfold. First, "it is claimed that educational research does not answer the questions which civil servants and ministers want answers to – often very quickly"; second, "research is said to be of little help to practitioners — to the teachers who, in their daily lives, for example, need well founded advice on how to teach this or that subject matter to these pupils"; third, "despite the amount of research (and the theses, journal articles and books are witness to there being a lot), it by and large remains fragmented and piecemeal"; fourth "much of the research, so we are told, is tendentious.

Under the banner of scholarship, ideological wars are fought". In summary, Oancea and Pring (2008, p. 16) argue that "educational research was found to be lacking in ... relevance; cumulateness and coherence; and cost effectiveness."

The academic research community countered these negative evaluations by arguing that such critiques are based on fundamental misconceptions of the nature of social science and the role and context of educational research, and ignore "the thoroughly practical character of teaching — the diverse and difficult-to-operationalise goals, the multiple variables and complex relationships involved — (which) may mean that research can rarely provide sound information about the relative effectiveness of different techniques" (Hammersley 1997, p. 154). Additionally, Bridges et al. (2008, p. 8) have pointed to the difficulties of relating research to policy, more especially that:

The notion of research providing a basis for policy is especially problematic in so far as it suggests that the process begins with research which then points to the required policy. This is an empirically and logically unsound view of the nature of policy and its construction. Policy is an ongoing process: it is not a vacuum waiting to be filled.

Similarly, but more fundamentally, Carr (2003, p. 132) argued that:

it is mistaken to construe human conceptual learning, or knowledge-acquisition, as a quasi-naturalistic process (of behavioural modification or 'cognitive development') apt for investigation via some kind of empirical science: on the contrary, any meaningful (human) educational learning (rather than animal training) is a matter of normative initiation into socially constructed and/or constituted rules, principles and values that no statistically conceived processes could even begin to explain.

As a result, Edwards (2000, p. 299) chastised the critics of educational research for "exaggerating the prospects for a science of teaching." The continuing debate which this criticism has engendered, although impressively impassioned (see, for example, MacLure 2005), thereby has generated much heat, but consequently has tended to deflect attention away from a serious analysis of how such criticisms could, or should be addressed.

The Discussion Framework

These criticisms, and the subsequent debate that resulted, led the U.K. Economic and Social Research Council to commission the Educational Studies Department at Oxford University, in 2004, to study criterial judgements in education research on behalf of academics, practitioners and policy makers. The fourfold aims of the study were to:

- clarify the concepts employed in relation to applied and practice-based research;

Table 58.1 Domains of quality in educational research

Episteme theoretike	Techne	Economic	Phronesis
Trustworthiness	Fitness to purpose	Auditability	Plausibility
Advancement of knowledge	Concern for enabling impact	Cost-effectiveness	Reflexivity, deliberation and criticism
Transparency/explicitness	Specificity and accessibility	Marketability and competitiveness	Engagement
Propriety	Salience/timeliness	Feasibility	Receptiveness
Paradigm-dependent criteria	Flexibility and operationalisability	Added value/'brand'	Transformation and personal growth
Scientific robustness	Social and economic robustness		

Source: Furlong and Oancea (2005, p. 15); Oancea and Furlong (2007, p. 133)

- map the various models currently in use and then explore the philosophical underpinnings of the models;
- review the recent UK initiatives concerning applied research and practice-based research;
- develop an understanding of quality to assist the development of quality criteria appropriate for different types of applied and practice-based research.

The paper by Oancea and Furlong (2007) which resulted (*Assessing Quality in Applied and Practice-based Educational Research: A Framework for Discussion*) attracted widespread interest in academia and government, both in the UK and beyond. In the UK it was widely circulated and discussed and, more significantly in terms of its impact on research policy, it was referred to explicitly in the criteria for the Education Unit of Assessment in the 2008 national Research Assessment Exercise, conducted by the Higher Education Funding Council for England. The Discussion Framework identified “four dimensions of quality — (1) epistemic, (2) technological, (3) capacity building and value for people and (4) economic” (2005, p. 10), and in subsequent paper, the authors returned to Aristotle’s *Metaphysics*, and utilised his conceptions of “*episteme theoretike* (knowledge that is demonstrable through valid reasoning); *techne* (technical skill, or a trained ability for rational production); and *phronesis* (practical wisdom, or the capacity or predisposition to act truthfully and with reason in matters of deliberation, thus with a strong ethical component)” (2007, p. 124). Within each domain (and that of the economic), they further identify characteristic attributes, and the results of this process have been summarised in Table 58.1.

The broader domains of quality in educational research adopted by Oancea and Furlong (2007) encompass all the elements of the widely accepted OECD (1994, p. 7) Frascati definition of research. Firstly, basic research (“theoretical work, undertaken to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any specific application or use in view,”) applies to the Episteme category, and it is this domain which encompasses the traditional parameters of excellence in social science research, namely, methodological and scientific robustness to which academic researchers aspire. Secondly, the Frascati definition of applied research (“also original investigation undertaken to acquire new knowledge. It is, however,

directed primarily towards a specific practical aim or objective”), applies to the *Techne*, *Economic*, and *Phronesis* categories, and these domains embrace those elements of excellence which are sought after by practitioners and policy makers alike.

Oancea and Furlong’s (2007) contribution can be welcomed as an important foundation for the analysis of an inherently problematic area — as Hodkinson (2004, p. 11) points out “there are almost as many different lists of suggested criteria for judging research as there are writers about the issue”. Their schema includes criteria which could be used to assess ‘the worth of educational research’. However ‘worth’, used in this context, can have two separate but inter-related meanings. First, it can refer to excellence and high or outstanding intrinsic qualities — in this sense, it might be considered that research into education was ‘of worth’. Second, it can be used with reference to the relative value of a thing, in respect of the extrinsic utility to which it can be put, or of the estimation in which it is held. Hence in this sense the ‘worth’ of educational research may refer to its greater or lesser utility for those within the teaching profession — it may be considered ‘worthwhile’. These meanings are clearly linked, in that something which has intrinsic worth in the first, objective, sense of the word, may frequently, (but not necessarily) have extrinsic worth in the second, subjective, sense.

Internal and External Criteria

Responding to the Discussion Framework, Hammersley (2008, p. 6) argued that:

In the case of academic research, the immediate audience is not practitioners but fellow researchers. The aim is to contribute to a body of knowledge, albeit one that relates to some issue of human concern. Thus, the likely validity of the findings is to be judged primarily by the research community.

Hence, for Hammersley, criteria for the assessment of the intrinsic value of educational research will be internal, and will be established by the research community from which the research arose, by a process of, *inter alia*, peer-review and subject discourse. Internal criteria refer to the robustness of the method adopted to address a research problem, in terms of adherence to established and accepted methods of

excellence, as defined and utilised by the subject discourse community — any research which meets these criteria, *par excellence*, might be adjudged ‘beautiful’ (indeed, academics not infrequently may refer to an article, or a colleague’s work in this way). Thus, although such criteria have to be validated by inter-subjective judgements within a subject discourse community, the benchmarks against which they are judged are epistemological in nature. Such criteria have much in common with the parameters utilised in 2008 by the UK Research Assessment Panel for Education (HEFCE 2007, p. 13) for judging the worth of research texts.

By contrast, external criteria of the excellence of research have, as their reference point, the impact of research, adjudging research to be significant if it has made an impact (in terms of altering policies or practices) on one or more external agents. In this respect external criteria comprise the measures developed by Furlong and Oancea (2005) of capacity development and value for people, cost effectiveness, marketability and competitiveness which enable an estimation of social and economic robustness. In this sense, a research artefact which has a widespread impact can be considered to be ‘popular’. These criteria are more akin to the new ‘impact’ element of the new UK Research Excellence Framework (REF, which replaces the RAE) which calls for “An assessment of demonstrable economic and social impacts that have been achieved through activity within the submitted unit that builds on excellent research” (HEFCE 2009, p. 20). Within the proposed REF, the relative weightings of the three constituents in the overall assessment of research are Outputs (i.e. *Episteme*) = 60 %; Impact (i.e. *Techne*, Economic, *Phronesis*) = 25 %; Environment = 15 %.

Given that the socio-economic impact of research may require a long-term gestation, at any particular point in time it may be possible for a piece of educational research to have worth in the first sense, using internal criteria (and hence be deemed ‘beautiful’) but not in the second sense, using external criteria (and hence not be ‘popular’). Similarly, it may be possible for a piece of research to have high utility in informing policy or practice (and hence be considered ‘popular’), but be deemed logically flawed or methodologically unsound (and hence lacking ‘beauty’) by academic researchers. A classic example of the latter is the work of the economist Milton Friedman, whose political philosophy, which called for a minimal role for government in favour of the private sector, heavily influenced the economic policies of the Reagan Presidency in the USA and the Thatcher government in the UK for more than a decade. When Friedman was awarded the Nobel prize for economics in 1976, this provoked a widespread protest by economists in academia who argued that his monetarist policies were incorrect; these criticisms were reiterated in 2007–2009

when Keynesian economists blamed policies espousing Friedman’s free-market philosophy for the credit crunch and the subsequent world-wide recession.

Hammersley’s attempt to identify possible types of evaluative judgments, in the light of the Discussion Framework, threw up further methodological problems, namely that “first, any comprehensive list is likely to be very long . . . secondly, the criteria can serve as little more than reminders, because they cannot be transparent, . . . because of necessary reliance on background knowledge and expert judgement” (2005, p. 7). Clearly, if a piece of work is to be judged by more than one criterion, then it is necessary to clarify the relationships (equal, superordinate, subordinate) between the criteria, a process which requires agreement between the assessors, which is liable to be problematic. As Hammersley points out, there are likely to be differences between assessments by the subject discourse communities of practitioner users and researchers. For example, in respect to the former “in relation to plausibility, . . . what they take to be established knowledge will be different from that which is well established within the relevant research community. This is because they will have practical knowledge deriving from individual and collective experience” (*ibid.*, p. 7). Thus, determining the relative values of internal and external criteria is likely to be inherently problematic because different types of research have different purposes for different audiences, and hence giving a low value to a piece which is designed to have no practical benefit would be to discriminate unfairly against it. Moreover, as Spencer et al. (2003, p. 4) point out, it is debatable “whether the concepts of quality used to assess qualitative research should be roughly the same as, or parallel to, or quite different from those used to assess quantitative research.” Additionally, Hammersley (2005, p. 5) points out that in the case of educational research, “theories are not the only legitimate goal of inquiry. Instead we may aim at producing descriptions or explanations” but such research would likely be adjudged as of lower value than theoretical work, when internal criteria are adopted. This raises the question as to whether internal and external criteria may (or should) have a hierarchical relationship to each other —the existence of a hierarchical relationship (and the basis for it) would clearly have significant implications for both the assessment of the excellence of educational research, and its future direction. In passing, it is worth noting that the proposed REF weightings, which suggest that the dominant criteria for judging the excellence of research should be internal, but that ‘impact’ external criteria are significantly important, resulted in a petition (see at: <http://petitions.number10.gov.uk/REFandimpact/>) being sent in October 2009 to the UK Prime Minister, Gordon Brown, urging him “to allocate funds for academic research solely on the basis of academic

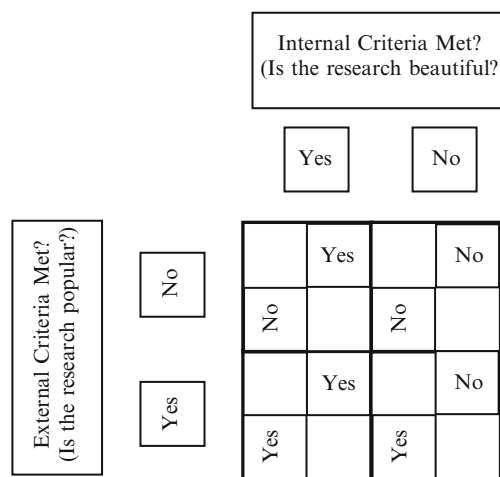


Fig. 58.1 Possibilities for meeting internal and external criteria

excellence and not on the basis of ‘impact’ or the judgements of ‘users’”. The petition attracted over 2,500 signatures from the academic community in less than a month.

However, without necessarily determining a hierarchy between internal and external criteria, or making assumptions about agreements by the assessors, it is possible to examine the possible outcomes when a piece of research either meets or fails to meet both internal/intrinsic and external/extrinsic criteria, as below in Fig. 58.1.

Where both the internal and external criteria relating to a piece of research are met, then an assessment of the positive worth of the research would presumably not be questioned, and it could be deemed to be both ‘beautiful’ and ‘popular’. Similarly, when a piece of research fails to meet either internal or external criteria then, assumedly, it could justifiably be disregarded. However, problems arise in the other two cells of the table when one set of criteria are met, but the other set are not. From a strictly Positivist point of view, it could be argued that, in those instances where internal criteria are not met (e.g. the research lacks intrinsic rigour or is logically flawed) then, irrespective as to whether or not the research meets external criteria, it should be disregarded, which would imply a hierarchical order between the sets of criteria. However, such statements are problematic, not least because judgements about whether or not internal or external criteria are met are made by subject discourse communities, within which evidence (and, by extension, the worth of research) may be disputed. Moreover, as has been considered, all judgements about educational matters are inferential, and the relationship between evidence and judgement is often contentious. As Oancea (2007, p. 251) points out:

the indicators used and the practices preferred in various evaluations of research are eclectic, reflecting the multitude of interests and demands that compete in setting the boundaries of accountability in research activities, rather than the nature of these activities themselves and of the particular forms of knowledge to which they contribute.

Rightly or otherwise, educational research has been criticised for being characterised by such disputes over the value of research. However, they are just as common in the assumedly more scientifically rigorous disciplines. Lawrence (2003), for example, relates how Berridge and Irvine’s (1984) paper on phosphoinositol and signalling, was originally turned down by the journal *Nature*, but subsequently published after an appeal and went on to become the second most quoted scientific article of the 1980s. (Lawrence’s article provoked a chorus of complaints about the tyranny of the process of academic publication, see *Nature*, 434, 479–80) Such cases demonstrate that the locus of a piece of research within the table (and hence its worth to both academic researchers and practitioners) may not be fixed, but may vary over time.

Education as a Social Science

The distinction between the merits of internal and external criteria in assessing research, mirrors a broader divide within the educational research community between those who seek to emulate the pure sciences and pursue a scientific positivist approach (often via the use of quantitative methodologies), and those who (often espousing a qualitative approach) believe that such a pursuit is ill-judged and even counter-productive. The debates and disputes about the nature and purpose of educational research in the late 1990s coalesced around these two broad discourses, described by Oancea (2005, p. 157f) thus:

one lamenting the misbehaviour of educational research from a managerial perspective (associated with a ‘big science’ model of knowledge production and an ‘engineering’ model of knowledge use), and the other attempting to defend it in the name of academic freedom and right to diversity, or to reinstate it through a humanistic model of knowledge transfer.

The net result, Oancea and Pring (2008, p. 27) argue, has been a

dichotomy between quantitative and qualitative research designs - the former receiving the approbation of Government looking for the evidence for particular policies, the other generally embraced by practitioners but disdained by those who want general answers to generally conceived problems.

Despite the fact that, as Harden and Thomas (2005, p. 265) point out, “much research does not fit into neat categories of ‘qualitative’ and ‘quantitative’”, protagonists from each side of the divide have been increasingly vocal in their support for one or the other framework. As Phillips (2005, p. 578) graphically relates:

On the one hand, there are influential figures who countenance only rigorous scientific research; they use as their model of science the randomised controlled experiment or field trial, and they point to experimentation in medicine as the ideal model for educational research. The existence of this group of

hardliners fills many other members of the research community with feelings of despair and utter hopelessness. On the other hand — at the other extreme pole of opinion — there are those who see the members of the first group as advocating ‘their father’s paradigm’ . . . that is hopelessly modernist, positivistic and imperialistic; . . . This second position is so murky and fraught with danger that it is regarded by the advocates of scientific rigour as leading to the total extinction of the empirical research enterprise.

Adopting such intractable stances makes progress difficult, more especially when, as Pring (2000b, p. 258f) points out,

To understand an educational practice requires the careful analysis of the social situation—the underlying social rules, the interpretation of the participants, the values and aims embedded within the practice. Such ‘qualitative research’ is quite clearly necessary, and the absence of it leads to the gross generalisations and misleading science. On the other hand, such qualitative work, given what we know about human beings and about the social structures which constrain their activities, simply sets limits and gives greater refinement to the more general verifiable and (where possible) quantifiable claims which research should constantly be seeking.

In attempting to find a way forward out of this impasse, Hargreaves (1996, p. 210) used medical research as a benchmark to which educational research should aspire, and pointed to the similarities between research into practice in medicine and education, more particularly that “both education and medicine are profoundly people-centred professions. Neither believes that helping people is a matter of simple technical application but rather a highly skilled process in which a sophisticated judgement matches a professional decision to the unique needs of each client.” In response, Hammersley (1997, p. 154) declaimed “that there are some fundamental problems at the core of Hargreaves’ analysis. . . . his reliance on the medical analogy is potentially misleading (as) [m]uch medical research does not involve the distinctive problems associated with studying social phenomena”. Similarly, Evans and Benfield (2001, p. 539) argue against steering “educational research in the direction of a ‘medical model.’ . . . (as) . . . [s]uch an approach will tend to reduce research questions to the pragmatics of technical efficiency and effectiveness”. Hammersley’s criticisms of Hargreaves’ medical analogy for educational research were trenchant, but perhaps misplaced and thereby generated a spirited rebuttal. Hargreaves (1997, p. 409) retorted that:

Hammersley’s error is to treat the research underlying medical practice as essentially homogeneous and as positivistic, working on physical phenomena in the interests of discovering universal laws and patterns of physical causation. Doubtless this applies to the root natural sciences and to some degree to the medical and clinical sciences. But with research into practice, the kind of research at the heart of evidence-based medicine, we are in the world of human beings making complex decisions. . . . His depiction of the knowledge-base of medical practice is, in short, crude oversimplification.

Hence Hammersley (2000, p. 225) and others have repeatedly argued that:

It should be clear . . . that there is a divide between pursuing scientific and practical research. They involve different goals and different immediate audiences; and the most effective approach to one generally involves serious costs from the point of view of the other. Thus, trying to do both kinds of research simultaneously will often result in the requirements of neither being well satisfied.

However, this is a finely drawn distinction which may be illusory in respect to education — as Neumann notes (2005, p. 185) “in professional disciplines the link between theory and practice is by definition inextricably close . . . while the distinctions between pure and applied, theory and practice, appear neat and clear-cut for discussion purposes, in actuality they overlap and blur”. Moreover, it is doubtful that those undertaking research (in the pure or social sciences) view the apparent divide with such clarity. For example, the 2005 Nobel Prize for Medicine was awarded to Marshall and Warren for their discovery of the bacterium *Helicobacter pylori*. Their research was methodologically scientific, but their aim was very practical — how to prevent gastritis and peptic ulcer disease. Similarly, in the social sciences, Alvin Gouldner, writing in the 1950s, suggested that theoretical social scientists also sought practical results for their research and believed that “Marx, Durkheim and Freud share the applied social scientist’s concern with bringing social science to bear on the problems and values of laymen with a view to remedying their disturbances” (1957, p. 94).

More helpfully, addressing what he refers to as “the ‘false dualism’ of educational research,” Pring (2000b, p. 257) argues that:

social events and facts (and such are educational practices) can be explained in much the same way as physical events and facts can. The methods of the social sciences, with all their statistical sophistication, are brought to bear upon an understanding of education, and from the understandings gained those in charge of education, either at the policy or at the professional level, will know what interventions will make things work.

Hence although it cannot be denied that “it is not just that different people interpret physical reality differently, but also that social reality is created by those interpretations. This quite clearly has a profound effect upon the nature of much of educational research that is concerned with learners acting within social traditions that shape their conceptions of reality” (Oancea and Pring, 2008, p. 29); the important question is whether these differences are so great as to make the derivation of general principles impossible. It is clear that the commonality of interpretations enables social discourse to continue, because if these different interpretations were very divergent, social life would tend to break down.

Although the purpose of using medicine as an exemplar for educational research was well intentioned, the

differences between the two are such that criticisms suggesting that the medical model is inappropriate are valid. Medicine clearly has more in common with the natural and life sciences (especially biology and chemistry), than with the social sciences such as education. Consequently, in examining the possibility of deriving general principles within educational research, the example of economics, rather than medicine, may be more helpful. The status of economics within the academic pantheon as comparable to, but different from, the sciences of physics, chemistry, medicine, etc., was recognised by the inauguration of a Nobel Prize for the discipline in 1969. As a social science, economics has many of the problems that currently beset educational research. However, despite these limitations, economists have succeeded in using quantitative analyses to build micro- and macro-level theoretical models, covering an array of economic activities (e.g. theories of the firm, labour markets, international trade, technological change, price fluctuations, etc.) often with a high level of statistical sophistication and predictive ability. Unlike theories in the pure sciences, economic models are often conditional rather than causal statements, but this has not prevented the discipline from building a cumulative body of relevant knowledge which informs policy makers and practitioners (businesses, trade unions, banks, etc.) and which, it is argued, educational research has failed to do. John Maynard Keynes, the father of modern macroeconomics, although himself a theorist (he authored *The General Theory of Employment, Interest and Money*) nevertheless believed that “The theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind which helps its possessor to draw correct conclusions” (1934, p. 6). Keynes’ opinion about the utility of economic theory has direct resonance with Bassey’s belief that the concept of ‘fuzzy predictions’ “offers a viable solution to the problem of generalisation in educational research and across the other social sciences” (2001, p. 20).

Concluding Remarks

Marie Curie was awarded the Nobel Prize for Physics in 1903 for discovering polonium and radium. Between 1898 and 1902, she and her husband managed to extract 1 g of pure radium chloride from 8 tonnes of pitchblende. Such examples demonstrate that research that is experimental and quantitative often can be arduous and difficult. Undertaking quantitative educational research requires the collection and collation of data (frequently a problematic process), choosing and applying statistical tests for analysis and then interpreting the results — as Berliner (2002) rightly observes

“Educational Research: The Hardest Science of All”. Donald MacIntyre, in his Presidential Address to the British Educational Research Association in 1996, acknowledged this by stating (1997, p. 129):

One thing I know from several decades of experience is that I find it very difficult to do educational research well. It requires rigorous thinking, perceptiveness, imagination, self-awareness, social skills and self-discipline in such demanding combinations that I am usually disappointed with the quality of my own work. To judge from the many papers that I have to referee for research journals, other researchers also find it difficult to do well, and many seem to lack an understanding of the diverse basic disciplines required.

Consequently, it may be easier (and, for some, more enjoyable) to demonstrate one’s academic élan and intellectual brio by declaiming another combative polemic demonstrating (inter alia) that the quantitative approach is inappropriate (or even harmful) to educational research. As Feuer et al. relate (2002, p. 6), “The history of educational research is not a simple tale of progress, and its story provides important insights for its future. Educational research has a long history of struggling to become — or to ward off — science.”

Writing in 1902, John Dewey, the educationalist and philosopher observed:

There is another group of sciences which ... are more remote from a scientific status. ... the social and psychological disciplines. ... compared with mathematic physics we can employ the term ‘science’ only in a tentative and somewhat prophetic sense — the aspirations, the tendencies, the movement are scientific. But to the public at large the facts and relations with which these topics deal are still almost wholly in the region of opinion, prejudice, and accepted tradition. (p. 4f.)

Reviewing progress since then, Phillips (2005, p. 582) states that, “A charitable judgment is that ‘philosophy of educational research’ is roughly at the stage that much philosophy of science was at six decades or more ago when real examples of research, discussed with historical richness, were relatively rare,” suggesting that the current debate about the focus of educational research, and how it is to be assessed, has some way to run before a satisfactory conclusion may (or may not) emerge. As Karran (2009) demonstrates, such debates are an integral aspect of academic freedom and of the freedom of discourse essential to the advancement of knowledge, and therefore will not readily abate. Moreover the nature of, and need for, this debate points up the possibility that, in succumbing to the demand for research which adopts a particular methodology and (assumedly) provides tangible impacts, there is a danger that particular insights may be lost; furthermore, such prescriptive actions are anathema to academic freedom. By its very nature, the location of new knowledge is unknown, although well-qualified and experienced academic staff are more likely than policy makers and politicians to know

where it may be located. Trying to “manage” research in order to increase its impact is as impossible as trying to “manage” the weather — although reasonably accurate short-term forecasts may be attempted. However, even if it is possible to measure previous rainfall (or existing research outputs) very accurately, it is still impossible to manage the weather (and university research) to make it more “productive” in terms of its impact.

Writing in 1849, Thomas Carlyle, the essayist and historian, somewhat unfairly described economics as “the dismal science” (1850, p. 531). Much has changed to the discipline since Carlyle’s day to render this description inappropriate, if not inaccurate. On the very last page of their undergraduate text book on Macroeconomics, Gregory Mankiw (Professor of Economics at Harvard) and his colleague Mark Taylor (2006, p. 609) have a concluding paragraph aimed at counselling their readers who are just commencing their studies of the subject. They state:

Economists and policy makers must deal with ambiguity. The current state of macroeconomics offers many insights, but it also leaves open many questions. The challenge for economists is to find answers to those questions and to expand our knowledge. The challenge for policy makers is to use the knowledge we now have to improve economic performance. Both challenges are formidable, but neither is insuperable.

This measured advice is just as applicable to those starting to undertake educational research. There is a risk that, despite adopting a quantitative approach akin to that of the pure sciences, educational research may fail to achieve the academic status or predictive power of (say) economics [cf. Rowbottom, and Aiston, this volume, on ‘physics envy’]. However, if it does not even try to adopt such an approach, then there is absolutely no chance that it can succeed. Furthermore, if we, as researchers and teaching practitioners, do not aspire to the highest level of scientific rigour and professionalism in our teaching and research, how can we expect those whom we teach and supervise to adopt such an approach to their own studies, and in their chosen professions? More significantly, the role of educational research is of more than just academic interest. As Michael Bassey (1992, p. 16), whose condemnation of the quality of educational research following his involvement in the 1992 RAE was reported in this chapter’s introduction, rightly avers, “Creating education through research is not just the title of a lecture or the theme of a conference; it is an imperative for the future of a democratic society”.

Note on Contributor

Professor Terence Karran is a Senior Academic in the Centre for Educational Research and Development, at the University of Lincoln, U.K. He is also a Docent in the Education Faculty at the University of Oulu, Finland. From 2005–2007, he was a Visiting Professor in Educational Technology at the

Universidad Autónoma de Guadalajara, México’s oldest and largest autonomous university, where he was the Director of UAG’s Distance Learning Centre and of the Mexican National Co-ordination Centre for the World Bank Institute’s Global Development Network for Latin America and the Caribbean.

References

- Bassey M (1992) Creating education through research. *Br Educ Res J* 18(1):3–16
- Bassey M (1993) Educational research in the universities and colleges of the United Kingdom: significant insights or trivial pursuits. Paper presented at the Social Sciences and Humanities Research Council of Canada Conference on Evaluation, Social Science and Public Policy, Ottawa, 11 June 1993
- Bassey M (2001) A solution to the problem of generalisation in educational research: fuzzy prediction. *Oxf Rev Educ* 27(1):5–22
- Berliner DC (2002) Educational research: the hardest science of all. *Educ Res* 31(8):18–20
- Berridge MJ, Irvine RF (1984) Inositol trisphosphate: a novel second messenger in cellular signal transduction. *Nature* 312:315–321
- Blunkett D (2000) Influence or irrelevance: can social science improve government? Speech made by David Blunkett, Secretary of State for Education and Employment, to a meeting convened by the Economic and Social Research Council on 2 February 2000. *Research Intelligence*, pp 12–21
- Bridges D, Smeyers P, Smith R (2008) Educational research and the practical judgement of policy makers. *J Philos Educ* 42(S1):7–14
- Carlyle T (1849) Occasional Discourse on the Negro Question. *Fraser’s Magazine for Town and Country*, XL [reprinted in *The commercial review of the South and West (later De Bow’s Review)*, June, 1850, Vol. VIII (Old Series), Vol. II, No.4, pp. 527–538]
- Carr D (2003) *Making sense of education*. Routledge-Falmer, London/New York
- Dewey J (1902) Academic freedom. *Educ Rev* 21(813):1–14
- Edwards T (2000) ‘All the evidence shows ...’: reasonable expectations of educational research. *Oxf Rev Educ* 26(3):299–311
- Evans J, Benefield P (2001) Systematic reviews of educational research: does the medical model fit? *Br Educ Res J* 27(5):527–541
- Feuer M, Towne L, Shavelson R (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Furlong J, Oancea A (2005) *Assessing quality in applied and practice-based educational research: a framework for discussion*. Department of Educational Studies, Oxford University, Oxford
- Gouldner A (1957) Theoretical requirements of the applied social sciences. *Am Sociol Rev* 22(10):92–102
- Hammersley M (1997) Educational research and teaching: a response to David Hargreaves’ TTA Lecture. *Br Educ Res J* 23(2):141–161
- Hammersley M (2000) Varieties of social research: a typology. *Int J Soc Res Methodol* 3(3):221–229
- Hammersley M (2005) *Assessing quality in qualitative research*. Paper for a TLRP seminar on assessing quality in case study and qualitative research, TLRP seminar series on quality in educational research, July, Birmingham
- Hammersley M (2008) Troubling criteria: a critical commentary on Furlong and Oancea’s framework for assessing educational research. *Br Educ Res J* 34(6):747–762
- Harden A, Thomas J (2005) Methodological issues in combining diverse study types in systematic reviews. *Int J Soc Res Methodol* 8(3):257–271

- Hargreaves D (1996) Teaching as a research based profession: possibilities and prospects. TTA Annual Lecture 1996. Reprinted in Moon B, Butcher J, Bird E (eds) (2001) *Leading professional development in education*. Routledge, London, pp 200–210
- Hargreaves D (1997) In defence of research for evidence-based teaching: a rejoinder to Martyn Hammersley. *Br Educ Res J* 23(4):405–419
- HEFCE (Higher Education Funding Council for England) (2007) *Research assessment exercise education panel assessment criteria*. HEFCE, Swindon
- HEFCE (2009) *Research excellence framework: second consultation on the assessment and funding of research*. HEFCE, Swindon
- Hillage J, Pearson R, Anderson A, Tamkin P (1998) *Excellence in research in schools*. Department for Education & Employment/Institute of Employment Studies, London
- Hodkinson P (2004) Research as a form of work: expertise, community and methodological objectivity. *Br Educ Res J* 30(1):9–26
- Kaestle CF (1993) The awful reputation of educational research. *Educ Res* 22(1):26–31
- Karran T (2009) Academic freedom: in justification of a universal ideal. *Stud High Educ* 34(3):263–283
- Keynes JM (1934) *Introduction to the Cambridge handbook of economic series*. Cambridge University Press, Cambridge/New York
- Lawrence P (2003) The politics of publication. *Nature* 422:259–261
- MacLure M (2005) ‘Clarity bordering on stupidity’: where’s the quality in systematic review? *J Educ Policy* 20(4):393–416
- Mankiw NG, Taylor MP (2006) *Macroeconomics*. Worth Publishers, New York
- McGaw B, Boud D, Poole M, Warry S, McKechnie P (1992) *Educational research in Australia: report of the review panel of research in education*. Australian Government Publishing Service, Canberra
- McIntyre D (1997) The profession of educational research. *Br Educ Res J* 23(2):127–140
- Neumann R (2005) Doctoral differences: professional doctorates and PhDs compared. *J High Educ Policy Manage* 27(2):173–188
- Newby H (2003) *Verbal Evidence to the House of Commons Education and Skills Committee*. 5 Mar 2003, London
- Oancea A (2005) Criticisms of educational research: key topics and levels of analysis. *Br Educ Res J* 31(2):157–183
- Oancea A (2007) From Procrustes to Proteus: trends and practices in the assessment of education research. *Int J Res Method Educ* 30(3):243–269
- Oancea A, Furlong J (2007) Expressions of excellence and the assessment of applied and practice-based research. *Res Pap Educ* 22(2):119–137
- Oancea A, Pring R (2008) The importance of being thorough: on systematic accumulations of ‘what works’ in education research. *J Philos Educ* 42(S1):15–39
- OECD (1994) *Main definitions and conventions for the measurement of research and experimental development: a summary of the Frascati manual*, OCDE/GD(94)84. OECD, Paris
- Phillips DC (2005) The contested nature of empirical educational research (and why philosophy of education offers little help). *J Philos Educ* 39(4):577–597
- Pring R (2000a) Editorial conclusion: a philosophical perspective. *Oxf Rev Educ* 26(3):495–501
- Pring R (2000b) The ‘false dualism’ of educational research. *J Philos Educ* 34(2):247–260
- Prost A (2001) *Pour un Programme Stratégique de Recherche en Education*. Ministère de l’Education Nationale, Paris
- Shavelson RJ, Towne L (eds) (2002) *National Research Council Committee on Scientific Principles for Educational Research*. Scientific Research in Education. National Academy Press, Washington, DC
- Spencer L, Ritchie J, Lewis J, Dillon L (2003) *Quality in qualitative evaluation: a framework for assessing research evidence*. Cabinet Office, Government Chief Social Researcher’s Office, London

Bronwyn Davies

Abstract

This chapter examines the resurgence of empiricism in educational research and the desire for research that predicts and controls. It traces the historical move away from empiricism and deconstructs some of the arguments that have been put forward to legitimate it. It then put sforward an argument for a different approach to legitimation from a post-critical, post-realist perspective. Legitimacy from this perspective is associated with its openness to the not-yet-known, where the writing and research practices are experimental — not in the sense of following rules and generating questionable causal links, but in the sense of generating new ideas and practices.

Keywords

Legitimation • Post-critical • Post-realist • Empirical • Experimental

Introduction

Legitimate: *conforming to established standards of usage, behaviour, etc.; based on correct or acceptable principles of reasoning; reasonable, sensible or valid; authorized, sanctioned by, or in accordance with law* (Collins English Dictionary). In this definition, legitimacy is concerned with conformity to practices that have, one way or another, acquired a status comparable to the law. In the broad field of social and educational research, “legitimation” has been colonized, perhaps predictably, by those working in empirical research, a field characterized by adherence to the rules of scientific method and by adherence to causal, evidence-based reasoning that is more often than not backed by statistical estimates of probability and generalizability. In scientific discourse, empirical means “derived from or relating to experiment and observation rather than theory” (Collins English Dictionary). It is this conception of data as holding meaning independent of theory that best

characterizes the prevailing interpretations of empirical endeavor in educational research. In such research truth claims rest on method, rather than the interpretive work involved in asking questions, generating data, or the work that is done writing down the new forms of understanding that are emergent in the research. Indeed interpretation is to be abhorred as it introduces an illegitimate bias into otherwise pure data and mathematical calculations.

How else might research and research writing make claims of legitimacy? Who decides what is legitimate and on what basis? How do research “findings” acquire the status of truth? How is the production of truth related to governmentality, or the control of populations through the ordering and legitimating of what will be understood as true or false (Foucault 2000a)? Should the concept and practices of legitimation be recuperated for use in the broader social and educational sciences? What might the practices of legitimation look like once broken free of this version of the empirical domain?

If legitimation is to be recuperated for use in the post-critical and post-realist field we may need to generate a different definition from the one that opens this paper. We could begin with: *born in lawful wedlock; enjoying full filial rights; filial: resembling or suitable to a son or daughter*

B. Davies (✉)
Independent scholar, Honorary member of the Melbourne Graduate
School of Education, Sydney, NSW, Australia
e-mail: daviesb@unimelb.edu.au

(Collins English Dictionary). And we might move this definition toward: generated from the discourses and practices of post-critical and post-realist research. The question of legitimacy would then not be about adherence to rules that have been generated by authoritative post-critical and post-realist philosophers and researchers, but whether the work can be recognized as that of a legitimate off-spring. Children are not necessarily obedient to their parents' rules, but can nonetheless be recognized by them and encouraged to flourish in diverse, surprising and unexpected ways, taking up what they've learned from their parents and using it elsewhere — in a move that exceeds what the parents could imagine. In such a model, “agency exceeds the power by which it is enabled” (Butler 1997, p. 15). Engaging in post-critical, post-realist research requires a capacity to engage creatively with the possibilities opened up by others. As Deleuze said of Foucault's work, with which he was creatively engaged, the approach to it should not be one of obedience but of independence: “When people follow Foucault, when they're fascinated by him, it's because they're doing something with him, in their own work, in their own independent lives. It's not just a question of intellectual understanding or agreement, but of intensity, resonance, musical harmony” (Deleuze 1995, p. 86).

Part 1 – Mapping the Field of Post-critical, Post-realist research

Lather (1991, 2006) characterized the broad field of social research according to what it was researchers *do* with their research. Positivist or empirical research is focused on *prediction* and *control*; interpretive and phenomenological approaches are focused on *understanding*; critical and neo-Marxist research seeks to *emancipate* its research subjects; and post-critical, post-realist research seeks to *deconstruct* the taken-for-granted realities of both researchers and researched.

This movement from positivism through to poststructuralism emerged historically, each new approach partially displacing the one that preceded it, and each one incorporating some elements of that which it sought to displace. It is useful to review this history to understand what we might currently mean by legitimation in the deconstructive or post-critical approach to research.

The power of positivist versions of empirical research lies in its capacity to predict. Such research had its heyday in the post World War II period, which was characterized by the “humanist romance of knowledge as cure” (Lather 1996, p. 359). It was given a major boost when computers became readily available in the 70s and early 80s, placing sophisticated statistical manipulations within anyone's reach. Its most secure niche was in Psychology and Educational Psychology Departments. In marked contrast, Philosophy,

Sociology and History departments, along with their education counterparts, were more interested in how theories of individual and social action enabled different kinds of truth to be told. *Understanding* required the generation of new thinking that lay at the complex interface of human experience and conceptual analysis.

With the revolutionary movements of the 60s, culminating in universities world-wide in the events of May '68, when students and workers united to overthrow the power of the establishment (Ali and Watkins 1998), and, with the growing feminist presence in universities in the seventies and eighties, “understanding” became an insufficient justification for research. Critical theorists were interested in *emancipation*, designing a ‘pedagogy of resistance within communities of difference. . . , [through] taking back “voice,” . . . [and] reclaiming narrative for one's own rather than adapting to the narratives of a dominant majority. . . [Their interest was in] overturning oppression and achieving social justice through empowerment of the marginalized, the poor, the nameless, the voiceless’ (Lincoln and Denzin 2003, pp. 625–626).

To begin with, this emancipatory research was based on a realist and oppositional epistemology. Things named by words had a real existence independent of their names; relations of power were real, oppression was real and was carried out by real people who had power; and those who had power had to be confronted and changed.

The poststructuralist response to critical theorists turned the analytic endeavor toward the ways in which the real world is *produced* through the mobilization of statements (*énoncés*) or things said, which might be thought of as “events of certain kinds which are at once tied to historical context and capable of repetition” (Olssen 2006, p. 9). In poststructuralist theory, “Discourse is not merely spoken words, but a notion of signification which concerns not merely how it is that certain signifiers come to mean what they mean, but how certain discursive forms articulate objects and subjects in their intelligibility” (Butler 1995, p. 138). The real world and relations of power no longer floated free of their production in discourse.

Prior to the turn to poststructuralist forms of analysis, critical theory had already disrupted disciplinary authority by critiquing the supposedly objective ‘view from nowhere’ of positivist, empirical social science.¹ Critical theorists had developed a reflexive social inquiry that saw social scientific knowledge itself as implicated in complex modes of production, and regimes of truth:

... most scholars no longer pretend some state of neutrality; we have learned to interrogate objectivity and subjectivity and their

¹ The discussion of critical theory that follows is adapted from an earlier chapter with Susanne Gannon (Gannon and Davies 2007).

relationship to one another. . . Accompanying this relinquishment of neutrality is a focus on self-consciousness and self-awareness; we are studying ourselves studying others. If we can no longer use detachment, distance and neutrality to achieve objectivity, we can at least document and track how what we study is influenced by who we are.

(Preissle 2006, p. 691)

Relations of power had become integral to the generation of new understandings. Critical theorists historicized and contextualized social science, and they highlighted the logocentrism of western rationalist and liberal humanist thought — which asserts that reason is universal, disinterested, dispassionate and can set us free. However critical theorists did not always abandon tenets of Enlightenment thought — such as the belief in the rational subject who can bring about change. In contrast to some of their post-critical, post-realist successors, they resisted the lure of ambivalence and uncertainty and of deferral of meaning, remaining committed to the belief that a representational form of truth is possible and can ground social action (Davies 1998; McCarthy 1994; Zima 2002). Such a position was doggedly realist, believing that transformative social change can only be accomplished within such a framing.

Much critical theory, however, can be described as having “largely mutated into poststructuralism” (Boler 2000, p. 362). Many poststructural and postmodern feminist writers, for example, began as critical theorists and maintained a strong critical edge in their writing (for example, Haug et al. 1987; Henriques et al. 1998; Lather 1991; Walkerdine 1990). Some resisted this move, believing that poststructural approaches are unable to produce social change. Others have taken up the post-critical turn that incorporates poststructuralist theory, embracing a quite different understanding of transformation and change. This is not premised on the *intention* of any single rational subject, or even collectives of subjects, since social subjects are theorized as sites of ambivalence, where power has constitutive effects and yet at the same time opens the possibility of agency in excess of that power. In this post-critical framework researchers and research subjects alike are captured by versions of truth, and exceed them: “This other thinking of knowledge if I can put it that way, does not exclude science. But it overturns and overflows its received idea” (Derrida 1994, p. 34).

And finally, the focus on discourse and on the mobilization of statements through which the real is accomplished in repeated utterances in specific historical periods and contexts makes the work of critique — paying attention to the way discourse is at work — particularly pertinent. In responding to critical theorists’ accusation that poststructuralist critique is incapable of transforming the world, Foucault argued:

I don’t think that criticism can be set against transformation, “ideal” criticism against “real” transformation.

A critique does not consist in saying that things aren’t good the way they are. It consists in seeing on what type of assumptions, of familiar notions, of established, unexamined ways of thinking the accepted practices are based. . . .

Criticism consists in uncovering that thought and trying to change it; showing that things are not as obvious as people believe, making it so that what is taken for granted is no longer taken for granted. To do criticism is to make harder those acts which are now too easy. . . .

. . . as soon as people begin to have trouble thinking things the way they have been thought, transformation becomes at the same time very urgent, very difficult, and entirely possible.

(Foucault 2000b, pp. 456–457)

Part 2 – Recuperating Empiricism at the Turn of the Century

U.S. policy-makers, caught up in the punitive and controlling zeal of neoliberalism (Davies et al. 2006; Lather 2006; Rose 1999), have attempted to undo the history I have sketched out in section “Part 1 – Mapping the field of post-critical, post-realist research”, rejecting the ways thought has unfolded in the social sciences over the last three decades. Intent on re-establishing the ascendancy of empiricism, with its claims to predict and control the future, they have declared empiricism to be the only recognizable form of research. As St. Pierre and Roulston (2006) observe, these policy makers “either never heard or choose now to ignore the victory narrative of the paradigm wars of the 1980s in which qualitative inquiry cleared a space for itself and became legitimate” (p. 674).

In this second part of the chapter I will briefly examine a sample of the new empiricist discourse written by the committee chair of the 2002 report of the U.S. National Research Council (NRC) along with two of his quantitative colleagues (Feuer et al. 2002a), which supports the federal legislation requiring funded research in education to be empirical. Their paper justifying the report is a good example of “men govern [ing] (themselves and others) by the production of truth” (Foucault 2000a, p. 230). I do so with two purposes in mind. The first is to pay some attention to the current provocation to think through whether legitimation might be thought differently. The second is to examine a text that lays out, authoritatively, what is legitimate, and to engage in my own provocative deconstructive work, asking in what way it might accomplish its own legitimacy.

The authors’ positioning of themselves is accomplished at the beginning of the paper with a thinly disguised reference to Hamlet’s “To be or not to be. That is the question”. This allusion lends an aura of high culture to the authors. It frames the debate, of ‘empiricism’ versus ‘qualitative research’, as unproductive and ultimately destructive, like Hamlet’s debate with himself about the dead king’s

instructions to kill his uncle. Their opening sentence: “To rejoice or to recoil: That is the question. . .” (Feuer et al. 2002a, p. 4) sets up the opposing sides. Their own side, for rejoicing, they link with words like “exalt”, “good news”, “the American people” and “thirsting for the rational”. The opposition, those who recoil, are associated with “cacophony”, “relentless barrage”, “trepidation”, and “worry”. Those who oppose the authors are positioned as the neuras-thenic Hamlet, who cannot see how to move forward. Like Hamlet, researchers opposed to the joy of the new policy, worry stupidly and to no avail. They imagine that “the splendours of unfettered scholarship will be eroded by creeping tides of conformity and methodological zealotry” (ibid.). Silly Hamlet. Silly readers. Obedience to the father (empiricist science, the dead king) would have caused much less grief. The authors hasten to assure the readers (protesting too much perhaps?) that they are not zealots. They are, after all, they tell their readers, able to recognise that there is work going on in humanistic, historic, and philosophical modes of inquiry. In the same breath, however, they insert their knife into any research that is not empiricist. “Science” is empiricist, as is “research”, “scholarship” and “inquiry” (ibid., p. 5). In a simple discursive move, while claiming to do otherwise, they colonize the whole discursive field and erase the opposition.

Their argument in support of the recuperation of empiricism turns on the observation that educational researchers *disagree* with each other as to what will count as good research. This disagreement mutates, in the blink of an eye, in their account of it, into weakness. They have “evidence” they claim (they are big on evidence) “to support the contention that educational research is perceived to be of low quality” (ibid.). This evidence of dispute/weakness they elaborate as follows:

Educational researchers themselves are often their own harshest critics (e.g., Kaestle 1993). They are often joined by a chorus of social and physical scientists, engineers and business leaders who lament weak or absent theory, accumulations of anecdote masquerading as evidence, studies with little obvious policy relevance, seemingly endless disputes over the desired outcomes of schooling, low levels of replicability, large error margins, opaqueness of data and sources, unwillingness or inability to agree on a common set of metrics, and the inevitable intrusion of ideology at the ground level.

(Feuer et al. 2002a, p. 5)

There is a footnote to this elaboration of the “evidence”, to which I turned, anticipating I would find there references to the body of work from the “physical scientists, engineers and business leaders” who apparently often (note the fondness for numerical terms) argue that educational research is weak. But no, these authorities remain anonymous. They are made to operate as signifiers of powerful voices in an abstract modality. All I found in the footnote was a bizarre note to the effect that the phrase “ideology at the ground

level” was found in Schumpeter’s critique of *economic* theory. Clearly I was looking for authority for the claim of evidence in the wrong place: the authority perhaps lies in the status of the authors themselves, whose influence as policy makers is backed by the new legislation. If *they* say people in powerful positions have spoken in this way, then it must be taken as true that they did so speak, and that the content of their speech has the status of being true.

Researchers themselves, in reply to these policy makers and unnamed (though numerous) critics, might reasonably argue that dispute among scholars is the evidence that the culture of science is at work, that scientific findings, at their best, even in the “hard sciences”, are understood as provisional and always open to critique. Since this is an argument not hard to come by, we must read the authors as not genuinely engaging with the field, but asserting their power to engage not in “the production of true utterances” but in an act of governing, through establishing the “domains in which the practice of true and false can be made” (Foucault 2000c, p. 230). Their statements work to justify the new order, marshalling conformity to the new empiricist cause. There is little point in the debate, as the allusion to Hamlet suggests, since empiricism, in true neoliberal fashion, is made to prevail by directing funding to those who comply. It is also typical of neoliberal discourse to obfuscate the issues in order to downplay the lines of force and thus reduce opposition, persuading those being shaped by the new order that they are conforming as a matter of their own free will (Davies et al. 2006).

The work that is left to do in their paper is the trivializing of the opposition and the shoring up their own identities. To this end much of the paper is devoted to a smoke and mirrors exercise in which the authors protest that they are innocent and that the exercise they are engaged in is not a form of zealotry. They claim, for example, that contrary to beliefs about experimental research, in what *they* advocate “context” is important, even essential. They gesture, for a moment, toward recognition of the critical and poststructuralist emphasis on difference and diversity:

... clarifying the conditions and contexts that shape causal connections in social and behavioural queries is essential for the progression of science and for its use in informing public policy. Specifically, generalizing findings and thus enriching our understanding of the applicability of a particular educational strategy across diverse settings and peoples that characterize education are issues of highest concern to those championing evidence-based education.

(Feuer et al. 2002a, p. 8)

This is not an interest in context as that is understood in post-critical and post-realist research. Context is no more, here, than a backdrop to the establishing of probabilities. Those who have closely studied the causal reasoning in experimental research have shown that the *ideal* as it is

expressed here, of generalizing from one situation to another, in “educational contexts that are inevitably varied, dynamic, over-determined and interrelated” (Eisenhart 2006, p. 700), is highly unlikely to be fulfilled. But this cannot just be read as “innocent” ignorance of the real complexity of education on the part of the authors. The discursive strategies (*enoncés*) of neoliberalism strategically undo dynamic diversity along with history. This is a project of conformity and control, where all school contexts will eventually be the same, with the same standards and same methods applied. The students will ideally become the interchangeable workers desired by neoliberal economies (Davies and Bansel 2007).

The authors’ reliance on unsourced numerical claims is interesting to examine. For example: “Almost everyone [who? who counted?] can appreciate, intuitively, the advantages of evidence-based policy” (Feuer et al. 2002a, p. 4). This numerical claim is then used to legitimate the authors’ self-appointed task of working out how to make this operational. The remainder of their paper is then devoted to an argument establishing that a scientific culture will lead to better research. Their argument follows five steps:

1. We believe the establishment of a scientific culture will lead to better research
2. That this is so is our *unifying theme*
3. *Most people* consider educational research is weaker than other areas
4. We take our points from the NRC report
5. Educational research shares the same *fundamental principles* as other “scientific endeavours”.

Of course this is no argument at all. St. Pierre and Roulston (2006) question the final plank of their “argument”: “The ethics of SBR’s Hegelian move to collapse all epistemologies and all methodologies into one metanarrative of a unified science that happens to be positivist, thereby effectively erasing them, must be questioned” (p. 678). It is interesting to observe how weak and how unethical an argument can be when it is couched in a discourse that has gained dominance through legislation and already enacted policy. Unable to see their own lack of objectivity, they reply to their critics: “In keeping with the institutional ethos of the NRC, our approach and that of the committee was to examine the issues as objectively as possible. And frankly, if our findings happen to coincide with the viewpoints of some federal officials, so be it” (Feuer et al. 2002b, p. 28). Indeed.

As a footnote to this analysis of Feuer et al.’s paper I would like to observe that empirical research *can* produce interesting findings. The problem with measurement-based studies is not that they cannot produce anything interesting since on occasion they have. The weaknesses lie in the fact that:

- the interpretive framework that is deployed doesn’t make visible the power of the research instrument to shape the thing that is measured;

- it allows only a focus on pre-specified variables, those variables being chosen because they are measurable or quantifiable, rather than that they will produce fresh insights;
- significant statistical correlations are interpreted as indicative of causal relations where there may be no causal link; and
- the statistical analysis can only confirm or deny the original hypotheses rather than generate new ways of seeing the problem being investigated.

Empirical researchers are thus captured inside the already thought, and in the repetition of existing relations of power and taken-for-granted assumptions. But perhaps most dangerous of all, the complex statistics currently deployed in such studies are not able to be understood and critiqued by the vast majority of researchers and readers. Readers must take on trust the statistical manipulations carried out in such reports. The advocates of this (re)new(Ed) empiricism argue that they cannot understand theoretically informed work, and that its inaccessibility deprives it of legitimacy. Yet empirical work, too, is carried out with only a very small audience able to decipher its logic and judge its claims. Certeau (1984) wryly observes that “beneath the fabricating and universal writing of technology, opaque and stubborn places remain” (p. 201).

Part 3 – The Study of Opaque and Stubborn Places: Legitimation in Post-critical and Post-realist Times

Legitimation in post-critical and post-realist times shifts from a reliance on prescriptive methods, and on technologies of assessment, to a focus on the conceptual work being done by the author/researcher. In the early eighties, Barthes (1984) observed that while method takes on the authority of law the “will-to-method is ultimately sterile: everything has been put into the method, nothing remains for the writing. . . [I]t is necessary, at a certain moment, to turn against method, or at least to regard it as without any founding privileges” (pp. 318–9). The reader/reviewer of post-critical and post-realist texts will look, rather, in assessing the legitimacy of a research text, for an adequate grasp of the conceptual ground. They will look for interesting and productive movement in the writing that takes up that conceptual ground and takes the reader toward new ways of asking questions of the social world. The project for post-critical, post-realist thought, Foucault argues, is to make it possible to think differently, and thus to open the possibility for acting differently, by making the present unthinkable (Foucault 2000c). The author of such writing potentially changes the very terms through which identity is

established, not in a prefigured, but in an emergent fashion: “I don’t feel it is necessary to know exactly what I am” says Foucault, “The main interest in life and work is to become someone else that you were not in the beginning. . . . The game is worthwhile insofar as we don’t know what will be the end” (Foucault, in Martin 1988, p. 7). The “game” has transformative potential for both writer and reader, in an experiment with excess — moving beyond what is already known and understood.

In a provocative mood, Foucault describes his writing not as theoretical, for theories are too closed for what he envisages. Rather, his work is experimental. He appropriates the language of empiricism and takes it elsewhere, mapping out a different conception of what it is that intellectual work might accomplish:

What I think is never quite the same, because for me books are experiences, in a sense, that I would like to be as full as possible. An experience is something one comes out of transformed. If I had to write a book to communicate what I’m already thinking before I begin to write, I would never get the courage to begin. I write a book only because I still don’t know what to think about this thing I want so much to think about, so that the book transforms me and transforms what I think. Each book transforms what I was thinking when I finished the previous book. I am an experimenter, not a theorist. I call a theorist someone who constructs a general system, either deductive or analytical, and applies it to different fields in a uniform way. That isn’t my case. I’m an experimenter in the sense that I write in order to change myself and in order not to think the same thing as before.

(Foucault 2000c, pp. 239–40)

Post-critical and post-realist research thus lets go of the *self-conscious authorial “I”* who is the centre of events, and who can see only with her own “eyes”; it lets go of *representation* (that is, the illusion that the world can be fixed from a single perspective) and opens up instead images of multiple lives, each one a manifestation of the whole. The writer is open to the experiment of writing in which the world is not reduced to what is known already, but pushes out into other ways of knowing, into the tangled possibilities of intersecting, colliding and separate lives (Badiou 2001). The author’s is one of those lives, and the analysis is part of the author’s autobiographical trajectory. The focal point of interest is not the author’s life, but the insights into the multiple intersections and possibilities it opens up. The underlying epistemology that informs this commitment to movement is a perception of ethical life as movement (Varela 1999). Authority that conserves, that seeks stasis in obedience to rules is a death-dealing authority. Authority that gives permission to engage in excess, that trusts the emergent processes through which life regenerates itself again and again, is both life-giving, and empowering.

Poststructural writing practices seek to open up strategies for subverting, for decomposing the discourses themselves through which subjects are constituted (Barthes 1977).

In that writing the rational conscious subject is decentred, and the play of desire and the unconscious are given space. Old ways of knowing, such as through master or grand narratives, are subjected to play and cease to be the sole arbiters of meaning. It is not that the grand narratives with their humanist heroes become irrelevant, but their storylines may be taken in directions that go against the grain of dominant ways of seeing. New subjectivities are not opened up through simple acts of opposition and resistance, but through a series of escapes, of small slides, of plays, of crossings, of flights — that open (other, slippery) understandings (Cixous and Derrida 2001; Davies 2004).

Returning to the proposed shift in definitions of legitimation, we could say that legitimacy comes not from obedience to prescribed rules, but from a relationship of respect and love, in which those who go before provide a horizon of possibilities that do not foreclose thought, but open it up. A vital shift in post-critical thought, then, over and above the rejection of a naïve realism and a liberal humanist version of agency, is the shift from oppositional resistance to love. This is ‘a more generous critical practice, a practice that is more about love than suspicion and that draws on rich phenomenological accounts of embodied experiences, feelings and intimacy. This is about difference without opposition, differences that are expanded rather than policed or repressed or judged’ (Lather 2007, p. 270). In writing about my own experiment in writing a play based in Kings Cross in Sydney, I found this same movement. “. . . [I]n opening oneself to the multiple lives in the Cross in this way, lives that intersect, diverge, and form part of a constant set of flows, what may have been threatening and alien, what may have been constituted as abject, to be cast out from oneself, is instead able to be greeted with love” (Davies 2008, p. 200).

And so . . .

In summary then, legitimate practice in post-critical, post-realist research might be characterised as follows.

The legitimate standpoint or positioning of the researcher:

- does not involve taking up the god-perspective, but positions the researcher-self as also taken up in discourse and context and relational positioning of self and other;
- makes clear how relations of power are at work on researcher and on research subjects during the research process — revealing who provides the terms of reference, who listens and how the researcher listens and what openness the researcher brings to the other and to difference;
- acknowledges the limits of self-knowledge and of knowledge of the other.

Legitimate theoretical, epistemological and language practices involve the researcher in:

- making visible taken-for-granted assumptions and practices (such as the performative relations between the body and the social, or the body and place);
- finding ways to see how language is at work on and through researchers and subjects (such as the way pronouns are implicated in the meaning of what is said);
- opening up spaces for thought that were previously closed (that closure being due to language, to habits of research/writing/practice, to invisible practices of normalisation and categorization);
- moving beyond description and repetition, and recognising the ways subjects are caught up in discourse, in social relations, in history;
- framing of the research question, and its analysis within the terms of philosophical concepts generated in post-critical research;
- making clear the links between conceptual framework and mode of data generation and interpretation;
- crossing disciplinary boundaries so that the conceptual work and insights from one can enliven and inspire the other, generating conceptual slides and escapes from usual ways of thinking;
- in theoretically informed research being clear and consistent about the theoretical framework being deployed, and in “experimental” research being open to the development of new conceptual possibilities that exceed current theoretical programs.

A legitimate politics of research practice:

- makes visible relations among individual subjects, discourse, social practice as these are lived out in those everyday practices through which the real world is constituted;
- unmoors old certainties through detailed attention to, and rethinking of, ethics of practice, including an understanding of the power of the researcher in relation to research subjects, requiring ongoing relational responsibility rather than adherence to a set of rules dictated by ethics committees;
- understands truth as provisional and situated, and at the same time powerful in the ways in which that which is taken to be true works on subjects and on institutions;
- recognizes and deconstructs the normalized structures and practices in thought that have become conceptual straightjackets, straightjackets that are not aware of their structures and that leave no way out of their strictures (such as treating dominant subjects as normative subjects, or trivializing what subordinate subjects do and think).

Legitimate technologies of research practice are open and flexible such that:

- a wide variety of research technologies may be adopted, both those already established and those yet to be developed (these might include interviewing, observation,

analysis of texts, immersion in the field as participant, autobiography, collective biography, ethnography, analysis of conversation, and so on); in each case legitimacy will not be related to following established rules of practice but finding ways to adhere to the principles outlined above;

- generalizations from data will follow from careful and detailed analysis of the recognizable and repeatable statements (*enoncés*) through which particular social orders are accomplished, and researchers will not overstate their claims about what is knowable on the basis of their analysis;
- evidence may follow from statistical manipulation of data, but will focus on close study of the way discourse (including statistical discourse) works to accomplish relations of power, positionality, and orders of meaning, including truth and falsity.

Postscript on Institutional Technologies of Legitimation

Peer review of books, book chapters and journal articles prior to acceptance for publication, assessment of impact factors of journals, and the counting of citations in specified high status journals have all become standard practice in assessing the value of a researcher’s work. In some universities research income has become the new proxy for research quality. Each of these adds an aura of legitimacy to our work, and each potentially has a negative impact on the quality of that work. Peer review, which is generally thought to be better if it is “blind”, may persuade writers to write as if they have no history of writing and no history of developing a program of thought, and to adopt a generic form of language and reasoning that will appeal to their unknown peers. Such limitations may push research toward what Foucault calls the theoretical and away from the experimental. The assessment of work according to the impact factor of the journal may push researchers to publish in and shape their work toward those journals with high impact, and to limit their use of more radical and innovative journals that may be more open to what is new. Citations may be positive or negative and may show little more than the writer’s location in a network of researchers who agree to cite each others’ work. Quality according to dollar income pushes researchers to divert their attention to grant writing and to shaping their thinking to those projects that can win funding. These institutional measures are no substitute for the open exchange of ideas and the focussed critique of each other’s work, which, far from signalling weakness as Feuer and his colleagues claim, contributes to the emergent processes through which life regenerates itself again and again.

Note on Contributor

Bronwyn Davies is a professorial fellow at Melbourne University and works as an independent scholar. She is well known for her work on gender, literacy, children's play, classroom research and her writing on poststructuralist theory. More recently she has been working on a critique of neoliberalism as it impacts on subjectivities at work and at school, the relations between pedagogy and place, and a book on Deleuze and collaborative writing. Details of her books and other publications can be found at bronwyndavies.com.au Her most recent book *Pedagogical Encounters* (with Susanne Gannon) was published by Peter Lang in 2009.

References

- Ali T, Watkins S (1998) *Marching in the streets*. Free Press, New York
- Badiou A (2001) *Ethics. An essay on the understanding of evil* (trans: Hallward P). Verso, London/New York
- Barthes R (1977) *Roland Barthes*. University of California Press, Berkeley
- Barthes R (1984) *The rustle of language* (trans: Howard R). University of California Press, Berkeley/Los Angeles
- Boler M (2000) An epoch of difference: Hearing voices in the 90s. *Educ Theory* 50(3):357–381
- Butler J (1995) For a careful reading. In: Benhabib S, Butler J, Cornell D, Fraser N (eds) *Feminist contentions: a philosophical exchange*. Routledge, New York, pp 127–143
- Butler J (1997) *The psychic life of power: theories in subjection*. Stanford University Press, Stanford
- Cixous H, Derrida J (2001) *Veils: cultural memory in the present*. Stanford University Press, Stanford
- Davies B (1998) In: Parker I, Parker I (eds) *Social constructionism, discourse and realism*. Sage, London, pp 133–145
- Davies B (2004) Introduction: poststructuralist lines of flight in Australia. *Int J Qual Stud Educ* 17(1):3–9
- Davies B (2008) Life in kings cross: a play of voices. In: Jackson A, Mazzei L (eds) *Voice in qualitative inquiry: challenging conventional, interpretive and critical conceptions in qualitative research*. New York, Routledge, pp 197–220
- Davies B, Bansel P (eds) (2007) *Neoliberalism and education*. Special issue. *Int J Qual Stud Educ* 20(3):247–260
- Davies B, Gottsche M, Bansel P (2006) The rise and fall of the neoliberal university. *Eur J Educ* 41(2):305–319
- de Certeau M (1984) *The practice of everyday life*. University of California Press, Berkeley
- Deleuze G (1995) *Negotiations 1972–1990* (trans: Joughin M). Columbia University Press, New York
- Derrida J (1994) *Spectres of Marx*. Routledge, New York
- Eisenhart M (2006) Qualitative science in experimental time. *Int J Qual Stud Educ* 19(6):697–707
- Feuer MJ, Towne L, Shavelson RJ (2002a) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Feuer MJ, Towne L, Shavelson RJ (2002b) Reply. *Educ Res* 31(8):28–29
- Foucault M (2000a) Questions of method. In: Faubion JD (ed) *Michel Foucault. Power. Essential works of Foucault 1954–1984, vol III*. The New York Press, New York, pp 223–228
- Foucault M (2000b) So is it important to think? In: Faubion JD (ed) *Michel Foucault. Power. Essential works of Foucault 1954–1984, vol III*. The New York Press, New York, pp 454–458
- Foucault M (2000c) Interview with Michel Foucault. In: Faubion JD (ed) *Michel Foucault. Power. Essential works of Foucault 1954–1984, vol III*. The New York Press, New York, pp 239–297
- Gannon S, Davies B (2007) Postmodern, poststructural and critical perspectives. In: Nagy Hesse-Biber S (ed) *Handbook of feminist research: theory and praxis*. Sage, Thousand Oaks, pp 71–106
- Haug F et al (1987) *Female sexualization: a collective work of memory* (trans: Carter E). Verso, London
- Henriques J, Hollway W, Urwin C, Venn C, Walkerdine V (1998) *Changing the subject: psychology, social regulation and subjectivity*, 1st edn. Methuen, London
- Kaestle CF (1993) The awful reputation of educational research. *Educ Res* 22(1):26–31
- Lather P (1991) *Getting smart: feminist research and pedagogy with/in the postmodern*. Routledge, New York
- Lather P (1996) Troubling clarity: the politics of accessible language. *Harv Educ Rev* 66(3):525–554
- Lather P (2006) Paradigm proliferation as a good thing to think with: teaching research in education as a wild profusion. *Int J Qual Stud Educ* 19(1):35–57
- Lather P (2007) (Post)feminist methodology. Getting lost OR a scientificity we can bear to learn from. In: Kofoed J, Staunæs D (eds) *Adjusting reality – power, resistance and lived life*. Danish University of Education, Copenhagen, pp 269–278
- Lincoln YS, Denzin NK (2003) The seventh moment: out of the past. In: Denzin NK, Lincoln YS (eds) *The landscape of qualitative research*, 2nd edn. Sage, Thousand Oaks, pp 611–640
- Martin R (1988) Truth, power, self: an interview with Michel Foucault. In: Martin LH, Gutman H, Hutton PH (eds) *Technologies of the self. A seminar with Michel Foucault*. University of Massachusetts Press, Amherst, pp 9–15
- McCarthy T (1994) Philosophy and critical theory: a reprise. In: Couzens Hoy D, McCarthy T (eds) *Critical theory*. Blackwell, Oxford/Cambridge, pp 5–100
- National Research Council (2002) *Scientific research in education*. National Academy Press, Washington, DC
- Olssen M (2006) *Michel Foucault. Materialism and education*. Paradigm Publishers, Boulder
- Preissle J (2006) Envisioning qualitative inquiry. *Int J Qual Stud Educ* 19(6):685–696
- Rose N (1999) *Powers of freedom. Reframing political thought*. Cambridge University Press, Cambridge
- St. Pierre EA, Roulston K (2006) The state of qualitative inquiry: a contested science. *Int J Qual Stud Educ* 19(6):673–684
- Varela FJ (1999) *Ethical know-how. Action, wisdom, and cognition*. Stanford University Press, Stanford
- Walkerdine V (1990) *Schoolgirl fictions*. Verso, New York
- Zima PV (2002) *Deconstruction and critical theory*. Continuum, London

Eve Tuck

Abstract

In this vignette, I respond to Bronwyn Davies' discussion on recuperating legitimation, and explore the question, "what does it mean to recuperate terms that have been colonized by doublespeak?" Concepts of validity, generalizability, and evidence are excavated. I outline a methodology of repatriation aligned with Davies' call for post-critical, post-realist research frames.

Keywords

legitimation • Validity • Generalizability • Repatriation • Theorizing back

Legitimation is an integral concept/worry in all research, whether acknowledged or not. Tenuous, ethereal, even fleeting, it is what keeps the academy awake at night. Bronwyn Davies has helped to give some heft and insight to those late-night ruminations by articulating many of the moving parts of legitimation. Her discussion provides both time-lapse-like narration of the emergence of critical and post-critical inquiry, and slow-motion-like 'footage' of effects of the prominence of neoliberal, empiricist 'prudence' on knowledge production – the cheetah chasing the antelope.

To launch her discussion, Davies applies two common yet contrasting definitions of legitimate. The first, the one employed most often in research discourse, is concerned with *conforming to established standards*. The second definition, concerned with filial relationship, connotes legitimacy as genealogical, generational. Though Davies moves on from this point, utilizing this second definition singularly toward characterizing the post-ness of post-critical and post-realist research, I am left trailing behind, caught up by the full implications of the generational on frames of research. To me, the implications are both liberating and scary.

In this, and in several other ways I found Davies' discussion of legitimation to be thought provoking. I'll outline these

ways in this response by reflecting on how legitimation has played out in my work as an Indigenous emerging scholar and participatory action researcher. The timing of the entrance of Davies' chapter in my reading is uncanny; I have been wanting to write about evidence, (supposed) evidence-based policy, and the real and imagined roles of research for some time now, and have just begun to sketch out some ideas. Davies' work brings me right to the center of my still-swirling thoughts, and I'm grateful to have the opportunity to write back to her a bit (in front of a wider audience.)

Davies' chapter has inspired me to reflect on the conceptualizations of legitimation I employ in my own participatory action research, and my work as an Indigenous theorist. In research projects, in-school, out-of-school, and pushed-out youth are trained in inquiry methods and read theory, policy, journalism, and poetry in order to work shoulder-to-shoulder as my co-researchers. The aims of *catalytic validity* (Reason and Rowan 1981; Lather 1991, p. 68) have been a beacon in my participatory research with urban and Indigenous youth on schooling injustices.

Catalytic validity represents the degree to which the research process re-orient, focuses, and energizes participants toward knowing reality in order to transform it. . . The argument for catalytic validity lies not only within recognition of the reality-altering impact of the research process, but also in the desire to consciously channel this impact so that the respondents gain self-understanding and, ultimately, self-determination through research participation.

(Lather 1991, p. 68)

E. Tuck (✉)

Educational Studies, State University of New York, New Paltz, NY, USA
e-mail: tucke@newpaltz.edu

Catalytic validity plays out as *meaningfulness* to communities involved in the research, and in addition, in my work, meaningfulness to my youth co-researchers. Emphasis on catalytic validity and meaningfulness when engaging in research with communities that have been betrayed by former research experiences, or have been over-researched but under-seen (Tuck 2009) is particularly crucial; Linda Tuhiwai Smith writes of Indigenous communities, “(R)esearch was talked about in terms of its absolute worthlessness to us, the indigenous world, and its absolute usefulness to those who wielded it as an instrument” (Smith 1999, p. 3). Thus, catalytic validity is an approach that attempts to invert the landscapes of meaning-making so that the foci of meaning are located in the experiences and knowledges of the community.

This concept can be intersected by Michelle Fine’s concepts of *theoretical generalizability* and *provocative generalizability* (Fine 2008, pp. 227–230). Fine’s contributions confront (prior fantasies of) the supremacy of large, randomized, blind trials in knowledge production, and assert a series of turns toward thinking about what can be lifted up and listened across in deeply place-based, locally meaningful inquiries that, when mapped as counter-topographies (Katz 2001) reveal structural, systematic dispossession, exploitation, and domination (Fine 2008). Theoretical generalizability contends with the ways in which theory meaningfully travels from rich context to rich context, even against all odds of easy transfer. It requires what Fine, Sarah Zeller-Berkman and I have identified as obligations and opportunities of jumping scale: integrity with home spaces, active respect for sovereignty, relationship, understanding competing responsibilities, and resisting homogenization (Fine et al. 2007).

Fine’s provocative generalizability, drawing on Maxine Greene’s calls to “fight the numbness of oppression,”

refers to researchers’ attempts to move their findings toward that which is not yet imagined, not yet in practice, not yet in sight. This form of generalizability offers readers an invitation to launch from our findings to what might be, rather than only understanding (or naturalizing) what is. Greene’s desire for social and ethical imagination rises as a standard for social research: does the work move readers to act?

(Fine 2008, p. 229)

The intersection of catalytic validity and theoretical and provocative generalizabilities marks the potential for inquiry that, like Davies’ kinship definition of legitimate, is both generative and iterative, expansive and seeking, but with an ethic of meaningfulness for home.

Crafting a response to Davies’ chapter has challenged me; though my own thinking has brought me to some of the same precipices of legitimation that Davies identifies, I have made different choices than her analysis suggests. This is interesting to me; although my work does not fit with the traditional definitions of empirical research (data-based rather than theory driven) or Foucault’s definition of a theorist (someone who

“constructs a general system. . .and applies it to different fields in a uniform way”) (Davies 2013, p. 448) I have come to identify myself as both an empirical and theoretical researcher. What is going on here? How can I stand to be so contradictory? Why do I describe my and my co-researchers’ analyses as explanatory rather than interpretive? Why haven’t I jettisoned the neoliberal empiricist lexicon of legitimation, and why have I instead decided to stretch the meanings within that lexicon to include my work and theorizing?

There are two major impulses at work here. First, is my ever-present awareness of the historical denial and exclusion of Indigenous people’s knowledge and epistemologies in research discourse, especially as Indigenous peoples served as research *subjects*. This, in tandem with my awareness of the diminished value of urban youths’ (with whom I work and conduct participatory research) perspectives, has led me to a self-consciousness not just about my scholarship, but my performance of myself as a scholar. I employ the neoliberalist, empiricist lexicon of legitimation to mark myself as scholar. This seems somewhat superficial, and I waver in my conviction that this is the best route for people who are under-represented in the academy. It is counter-productive to the fields of research about which I care for me to continue to employ a lexicon that systematically de-recognizes those fields, yet it is also counter-productive for those fields to not have under-represented scholars whose research is taken seriously as members of the field. Literacy in the lexicon becomes a point of access, itself a legitimation.

Further, on the point of explanation/interpretation, the social explanations of Indigenous people, urban youth, and many other disenfranchised groups are regularly cast aside as mere interpretations. I welcome the humility of well-established researchers who acknowledge that Truth can only be partial, and that they can only offer interpretations of what they have observed. However, it is also important to remember that the right to claim an analysis as explanatory or interpretive is mitigated by social location.

The second impulse at work also points to the ways that the stakes of legitimation vary for different groups, and can be higher for under-represented scholars and communities. This is my impulse to reclaim language that has been used to strip power from oppressed communities. Davies talks about this in her call toward recuperating legitimation. Recuperating legitimation through the frames of post-critical, post-realist research “requires a capacity to engage creatively with the possibilities opened up by others,” (Davies 2013, p. 444) and to “make harder those acts which are now too easy” so that “transformation becomes at the same time very urgent, very difficult, and entirely possible” (Foucault 2000, p. 457, as quoted by Davies 2013, p. 445). Davies positions these practices in opposition to practices of recuperating empiricism, those operations that supposedly perform rationality, reason, and reliance on

evidence, while characterizing opponents as quibbling, disagreeable, worriers, as displayed in an article by a US National Research Council committee member and two colleagues (Feuer et al. 2002, as discussed by Davies 2013).

Practices of recuperating legitimacy through/by post-critical and post-realist research are distinguished by their embracing of trajectories of knowing, of multiplicity, of the intersectional, of movement, of “life as movement.” Further, “legitimacy comes not from obedience to prescribed rules, but from a relationship of respect and love, in which those who go before provide a horizon of possibilities that do not foreclose thought, but open it up” (Davies 2013, p. 448). The shift in weight from paranoia to intimate curiosity, from chastising to generous criticality, yields a stance in which ideas can flourish, and rhizomatically expand.

Recuperation is a valuable strategy in a neoliberal climate so entrenched in Orwellian doublespeak, that which boldly, thinly conceals true meaning by distorting usage of language. Paralleling Orwell, Bourdieu (1998) said this of neoliberalism:

This initially desocialized and dehistoricized ‘theory’ has, now more than ever, the means of *making itself true*, empirically falsifiable... In the name of the scientific programme of knowledge, converted into a political programme of action, an immense *political operation* is being pursued (denied, because it is apparently purely negative), aimed at creating the conditions for realizing and operating of the ‘theory’; *a programme of methodical destruction of collectives*... (p. 95)

What does it mean to recuperate terms that have been colonized by doublespeak? For example in U.S. education policy, the doublespeak of “evidence based reform,” “scientifically based research,” and “data driven decision making” is supremely prevalent in the contemporary conversation on schools; doublespeak because while signaling tried and tested, successful approaches, policies like No Child Left Behind demarcate programs like phonics-only reading instruments, goals such as 100 % proficiency by 2014, and consequences like the 5 year insufficient AYP sequence that have no empirical backing (Rebell and Wolff 2008; Noddings 2007).

A sobering thought: Does educational research, or social research now or ever truly impact educational or social policy? If we don’t know the answer, why do we conduct our research as though it surely does? Evidence is a tricky notion these days, and recuperating it, like recuperating legitimacy, is an act no less than decolonizing our epistemologies so that we can maintain that proof is not only in our statistical print-outs, but also and importantly, “proof is under our fingernails, in our melting footprints, on our park benches, in our clusters, in our flights, on our backs, our chapped lips, in our stories and the grandmothers who told them” (Fine et al. 2007, p. 19).

In my own work, I engage practices of reclaiming not as recuperation, but as repatriation, and have come to call my approach a methodology of repatriation. A methodology of repatriation borrows and builds upon elements from Participatory Action Research (Fine and Torre 2004, 2006; Torre and Fine 2003, 2006; Fals-Borda and Rahman 1991; McTaggart 1997) and from Indigenous and decolonizing methodologies (Smith 1999, 2005; Grande 2004; Alfred 2005). There are some important differences between participatory action research (PAR) and decolonizing methodologies, I have used the gaps between them to prod the ethical commitments and conditions of participatory decolonizing approaches. I call this a methodology of repatriation because it imbibes a particular politic of reclaiming, reframing, repurposing, and reparation.

The word repatriate comes from the Latin word *repatriare*, which means restoring homeland, or going home again. It conjures a sense of turning tides, or turned pages. It commands an acknowledgement that would not otherwise come. I was raised with a thick thirst for repatriation. Broken promises and betrayal have defined the relationship between Unangan people and the United States Government. In just one example, after Dutch Harbor was bombed in 1942 during World War II, every person of Aleut ancestry was removed from the entire Aleutian chain and the Pribilofs and interned for 4 years in abandoned warehouses and canneries on the South East coast of Alaska.

I grew up knowing that I had a dance that had been lost in the 4 years of internment. I had a language that only few elders could speak. I had a costume that was no longer sewn. When I was a child, my relatives were involved in a large effort to garner an apology from the U.S. Government to the Aleut people for negligence and disrespect during internment and after. The U.S. Government decided to tack the Aleut internment to an already under-works act, The Civil Liberties Act of 1988, that made restitution to Japanese-Americans that were also interned during World War II.

This was our formal apology but to me, it didn’t feel like anything. Now I know that I was expecting for the apology to bring back our songs, our dances. I was confusing the apology for the repatriation. It has been our generation that has spent the time with our elders, talked with other tribes, done the research, and, at times, filled in the gaps with our best guesses to bring back our songs, our dances, our regalia, our drums. Now, elders are again making grass baskets, hunting visors, seal bone dolls. We are repatriating our stories, our traditions, our futures.

Components of a methodology of repatriation include balance, sovereignty, desire, rhizomatic complexity and multiplicity, and theorizing back (Tuck 2008a). Here, I’ll discuss the praxis of theorizing back, an approach I have

adapted from Linda Tuhiwai Smith's concept of researching back (Smith 1999; Tuck 2008b):

Theorizing back requires us to reprove and reclaim theories that have been used against us, theories that we have mis/believed about ourselves, that have fed our own self abnegation, theories that have made us rely upon, cater to, offer gratitude to, and even congratulate the colonizer, and theories that, as one CREDD¹ researcher has said, "paint us as lazy, crazy, and stupid." Researching back and theorizing back are refusals to speak against ourselves, shifting the scrutiny off of our own bodies and rightly placing it upon the institutions that naturalize racism, misogyny, gross disparities of wealth, homophobia, and neglect. (Tuck 2008b, p. 120)

Theorizing back is a repatriation of theories and discourses used against us, and at the same time, is a pedagogy of the ethics of dealing with traditional and emergent sacred material and stories (Tuck 2008a; Tuck et al. 2008).

Many have pointed to the barbed-wire nature or neoliberal double-speak; our challenge as researchers is to develop strategies to dis/engage/cut through/reason over the rabble of the doublespeak –this is why, as Davies illustrates, discourse frameworks are so crucial, "the real world and relations of power no longer floated free of their production in discourse" (Davies 2013, p. 444). In the wise and comprehensive lists that Davies presents in the later passages of the essay, she demonstrates that the inverse must also be true, that discourse be responsible to communities, (tribes,) homes, and places. Recalling Fine (2008) standard for provocation, "does the work move readers to act?" Davies' lists are a compelling gift.

Deleuze and Guattari (1983) supply one final yet ever-connected approach to thinking about discourse, legitimation, lives, and places. They insist we ask the questions, "Given a certain effect, what machine is capable of producing it? And, given a certain machine, what can it be used for?" (p. 3). In this essay, Davies has enacted this questioning by interrogating the prominence of neoliberal empiricism, and the legitimating-machine that has produced it. Further, grappling with the legitimating-machine, she has provoked what it can be use/d/ful for. Whether we in turn repatriate or release legitimation, Davies' exploration excites our un(der)examined relationships to legitimating discourses and processes.

Note on Contributor

Eve Tuck is an assistant professor of educational foundations at the State University of New York at New Paltz. She has conducted participatory action research with urban youth on mayoral control of their schools, neoliberal

education policy, and the value of the GED credential (General Educational Development). She is the author of 'Suspending damage: A letter to communities' (2009) in the *Harvard Educational Review* and co-author of *Theory and Educational Research: Toward critical social explanation* (2008) New York: Routledge.

References

- Alfred GR (2005) Wasase: indigenous pathways of action and freedom. Broadview Press, Peterborough
- Bourdieu P (1998) Acts of resistance: against the tyranny of the market. The New Press, New York
- Davies B (2013) Legitimation in post-critical, post-realist times, or whether legitimation? In: Reid AD, Hart EP, Peters MA (eds) A companion to research in education. Springer, Dordrecht, pp 443–450
- Deleuze G, Guattari F (1983) Anti-Oedipus: capitalism and schizophrenia. University of Minnesota Press, Minneapolis
- Fals-Borda O, Rahman A (1991) Action and knowledge: breaking the monopoly with participatory action research. The Apex Press, New York
- Feuer MJ, Towne L, Shavelson RJ (2002) Scientific culture and educational research. *Educ Res* 31(8):4–14
- Fine M (2008) An epilogue, of sorts. In: Cammarota J, Fine M (eds) Revolutionizing education: youth participatory action research in motion. Routledge, New York, pp 213–234
- Fine M, Torre ME (2004) Re-membering exclusions: participatory action research in public institutions. *Qual Res Psychol* 1(1):15–37
- Fine M, Torre ME (2006) Intimate details: participatory action research in prison. *Action Res* 4(3):253–269
- Fine M, Tuck E, Zeller-Berkman S (2007) Do You believe in Geneva? In: McCarthy C, Durham A, Engel L, Filmer A, Giardina M, Malagrega M (eds) Globalizing cultural studies. Peter Lang Publications, New York, pp 493–525
- Foucault M (2000) So is it important to think? In: Faubion JD (ed) Michel Foucault. Power. Essential works of Foucault 1954–1984, vol III. The New York Press, New York, pp 454–458
- Grande S (2004) Red pedagogy. Rowman and Littlefield, Lanham
- Katz C (2001) On the grounds of globalization: a topography for feminist political engagement. *Signs: J Women Cult Soc* 26(4):1213–1234
- Lather P (1991) Getting smart: feminist research and pedagogy with/in the postmodern. Routledge, New York
- McTaggart R (1997) Participatory action research: international contexts and consequences. SUNY, Albany
- Noddings N (2007) When school reform goes wrong. Teachers College Press, New York
- Reason P, Rowan J (1981) Issues of validity in new paradigm research. In: Reason P, Rowan J (eds) Human inquiry. Wiley, Chichester, pp 239–250
- Rebell MA, Wolff JR (2008) Moving every child ahead: from NCLB hype to meaningful educational opportunity. Teachers College Press, New York
- Smith LT (1999) Decolonizing methodologies: research and indigenous peoples. Zed Books, Dunedin
- Smith LT (2005) On tricky grounds: researching the native in an age of uncertainty. In: Denzin N, Lincoln Y (eds) Handbook of qualitative research, 3rd edn. Sage, Beverly Hills, pp 85–107
- Torre ME, Fine M (2003) Youth researchers critically reframe questions of educational justice. *Harv Fam Res Proj Eval Exch* 9(2):6–22

¹ The Collective of Researchers on Educational Disappointment and Desire, my co-researchers on the Gate-ways and Get-aways Project, a project that investigated the relationships between New York State exit-exams and other education policies, the General Educational Development (GED) credential, and school push-out.

- Torre ME, Fine M (2006) Researching and resisting: democratic policy research by and for youth. In: Ginwright S, Cammarota J, Noguera P (eds) *Beyond resistance: youth activism and community change*. Routledge, New York, pp 269–285
- Tuck E (2008a) Gateways and getaways: urban youth, School push-out, and the GED. Dissertation manuscript, State University of New York, New Paltz
- Tuck E (2008b) Theorizing back: an approach to participatory policy analysis. In: Anyon J, Dumas M, Linville D, Nolan K, Perez M, Tuck E, Weiss J (eds) *Theory and educational research: toward a critical social explanation*. Routledge, New York, pp 111–130
- Tuck E (2009) Re-visioning action: participatory action research and indigenous theories of change. *Urban Rev* 41(1):47–65
- Tuck E, Allen J, Bacha M, Morales A, Quinter S, Thompson J, Tuck M (2008) PAR praxes for now and future change. In: Cammarota J, Fine M (eds) *Revolutionizing education: youth participatory action research in motion*. Routledge, New York, pp 49–83

Robin McTaggart

Abstract

This chapter argues that principles of ethical practice of educational research must be informed by broader epistemological and political analyses. Ethics and the relationship between researcher and researched have evolved as the vulnerability of participants has been recognised. Increased community participation in research as it has developed in educational participatory action research provides guidance because of: (i) its strong commitment to participation, and (ii) its active engagement in educational and social change that generates very challenging ethical dilemmas considered only tangentially by other research approaches. The history of advocacy for participation in educational research shows the articulation of ‘principles of procedure’ in ‘democratic’ evaluation and participatory action research. Some sub-practices of participatory action research are used to illustrate how ethical dilemmas of research and their links to educational practice can only be resolved through careful and disciplined self-reflection by participants.

Keywords

Ethics • Politics • Epistemology • University ethics committees • Participatory action research

Introduction

This chapter provides an overview of ethics in educational research and argues that ethics must be considered along with broader epistemological and political analyses. My key themes are the changing relationship between researcher and researched and the increasing recognition of the vulnerability of participants. I urge increased community participation in research to address this vulnerability. I explore educational participatory action research as a distinctive example because of: (i) its strong commitment to participation, and (ii) its active engagement in educational and social change that generates very challenging ethical dilemmas confronted somewhat more tangentially by other research approaches.

The chapter traces the history of advocacy for participation in educational research and sources the reflexivity of program evaluation for early explicit exposition on ethical practices in research, and links the evolution of ‘principles of procedure’ in ‘democratic’ evaluation and participatory action research. Also described are four sub-practices of critical participatory action research in terms of the discipline they bring: (i) to the objectification of experience, (ii) to subjectivity as affective response to a situation, (iii) to subjectivity as agency in the situation, and (iv) to participation using the Habermasian concepts of communicative action, communicative space and public spheres. Each sub-practice of participatory action research generates distinctive ethical dilemmas that can only be resolved through careful and disciplined self-reflection by participants. In conclusion, I argue that detailed consideration of participatory action research signals ethical issues of relevance to all educational researchers, even though they might engage the relationship between their work and educational practice in different ways.

R. McTaggart (✉)
School of Education, James Cook University,
Townsville, QLD, Australia
e-mail: robin.mctaggart@jcu.edu.au

A Commitment to Ethics

T.H. Huxley's characterisation of the researcher 'as a mere secretary to the universe, taking down its dictation' (Plath 1976, p. 358) has gone. So too has Plath's emphasis on interpretation (ibid.):

The data of my acquaintance are lazy: they never search for anything. They tell me that's the duty of the scholar.

Ethical practice has been a significant focus in all research since World War Two. The horrendous abuses of concentration camp 'medical' experimentation have permanently permeated Western consciousness.¹ Racism in medical research in the United States around the same time has also exacerbated concern (Caplan 1992). Despite increasingly strict monitoring regimes applied to the ethics of research practice, some abuses have continued. Whilst less egregious on the surface, their impacts are offensive because they typically affect the relatively powerless disproportionately. Examples include assumptions about comparative experimental field-work on HIV-AIDS in the Third World (Angell 1997) and experimentation with infertile and fertile women's bodies for fertility stimulation among Western Women (Klein 1989a, b).

'First, do no harm',² the ethical principle taught for centuries in medical schools, is difficult to honour in some educational research. In educational and social settings, harm may occur in many unpredictable ways. Research has always been reflexive, but whether it is for good or ill is challenging for the researcher. The once ready refuge of methodological surety no longer nurtures unchallenged rectitude. Lively debate over several decades has continued in the social sciences, as critical, feminist and post-colonial literatures have interrogated implicitly hierarchical relationships between researcher and researched. Key dimensions to this critique highlight the importance, and interrelatedness, of ethical, political and epistemological matters in educational research. For example:

Ethical

Some researchers and former subjects (or 'objects') of their research have questioned the ethics of research practices in which researchers collect information from informants,

assume control of the information, and without consent, use it to represent the lives of informants and their communities. Academic careers have been built from the representation of other people's lives, but sometimes little benefit extends to those represented. Academic researchers have been seen to be profiting professionally from 'data raids' on communities. Also, as I show below, sometimes, research causes harm, while some research has been morally questionable simply because it involves exploitation.

Political

Issues do not end with ethics. Shifts in power are involved too. Researchers (and evaluators) can change the political economy of knowledge production and distribution in the settings they study. Sometimes unwittingly, they dominate the power distribution between themselves and other research participants. The often cited cautionary question 'Who gets to know what about whom and when?' foregrounds the ways in which some researchers and researchers intervene in people's lives, regardless of intentions. The adage 'Knowledge is power' assumes relevance in different ways and some researchers are clearly naive and inconsiderate in how they affect people's lives, particularly when people are disempowered by devaluation of their own accounts and stories of their struggles. Some researchers counter by arguing that the increased understanding, clearer values and new skills generated by research could be a source of empowerment for people. Whichever way the issue pans out, the politics of representation have concrete effects and these are unlikely to be even-handed.

Epistemological

Many professions have been demystified gradually as standards of education improve. Research is no exception and internal critique especially reveals manifold relationships between the knowledge and power of the academy and the potential for disempowerment or lost opportunities for empowerment for disadvantaged and disenfranchised groups. Some participants in research have seen their own interpretations of their situations supplanted by those of others. Yet as surety and probity of methodologies are questioned, 'official' accounts and interpretations have been adjudged to be just one problematic view. Other knowledges can come to assume status alongside those valorised by the academy. Craft knowledge, practical knowledge, local knowledge, Indigenous knowledge and academic knowledge have variously come to be recognised as expertise, situational in their own way. Reconciliation of knowledges is seen to be a powerful source

¹ See the horrendous scale of this at the Museum of Tolerance Multimedia Learning Centre <http://motlc.wiesenthal.com/site/pp.asp?c=gVKVLcMVluG&b=358201>.

² The edict 'First, do no harm' is sometimes wrongly attributed to the Hippocratic Oath, ethical beacon for medical doctors for centuries. The sentiment is there, and appears in other work by Hippocrates, but he may not be the author. The Latin version is 'Primum non nocere', sometimes attributed to the Roman physician, Galen.

of renewal, epistemologically, politically and ethically (Marika et al. 1992).

Given these dimensions, competing epistemologies, ethics, and politics of research have all to be engaged before, during and after the interaction of the researcher with other participants in the research act. Recognising the reflexivity of research, its capacity for good or ill effect independently of its findings, universities have become increasingly interested in the 'ethics of research'. The duty of the scholar becomes more onerous: the intensity of interest has been exacerbated by publicity around medical research ethics, and all 'research involving human subjects' is now exposed to rigorous ethics approval processes in universities. In part, this is motivated by university fear of litigation, and ethics requirements of national and state research funding bodies as a condition of research grants have made many universities wholly compliant.

In education, national professional associations specify their own principles for ethical practice. For example, Ethical Standards of the American Educational Research Association were adopted in June 1992 by AERA to stimulate collegial debate and to 'evoke voluntary compliance by moral persuasion'. The AERA Ethical Standards were revised in 1996 and in 2000. The Australian counterpart of AERA, the Australian Association for Research in Education, describes its Code of Ethics for Research in Education as its 'definitive code'. The British Educational Research Association has acted similarly, producing Revised Ethical Guidelines for Educational Research in 2004 from those first adopted in 1992. The codes are similar to each other, but do reflect some national differences in emphasis. They are readily accessed on each association's website (www.aera.net, www.aare.edu.au and www.bera.ac.uk).

There is little point reiterating detail of these codes and their rationales here, but I will summarise elements of the Australian Code of Ethics to suggest what approaches a collective response to ethics in research, which also illustrates how ethical principles have been institutionalised and are enforced for disciplines in universities and research institutes. The Code is a 'guide' to members, outlining principles and cautioning that their application to particular cases requires 'ethical sensitivity'. The Association notes that there may be disagreement about application of the Code, but considers it likely to produce agreement in most cases. The Code is not a 'set of laws' but a 'guide', 'a starting point for further thought'. Distillations from the Code presented here should stimulate thought too. However, readers should not initiate any research based upon these distillations but must consult detailed ethics guidelines applicable in their own research settings. The summary is provided to illustrate key ethical principles guiding Australian educational research and evaluation.

Australian Code of Ethics for Research in Education: Summary

The Australian Code (Bibby 1997) is built on four basic principles:

1. The consequences of a piece of research, including the effects on participants and social consequences of its publication and application, must enhance general welfare.
2. Researchers should be aware of the variety of human goods and the variety of views on the good life, and the complex relation of education with these. They should recognise that educational research is an ethical matter, and that its purpose should be the development of human good.
3. No risk of significant harm to an individual is permissible unless either that harm is remedied or the person is of age and has given informed consent to the risk. Public benefit, however great, is insufficient justification.
4. Respect for the dignity and worth of persons and the welfare of students, research participants, and the public generally shall take precedence over self-interest of researchers, or the interests of employers, clients, colleagues or groups.

Specific Principles

Harm

Research design should minimise the risk of significant harm.

Consent

Informed consent may be given by adults to research involving any risk to themselves. Researchers should not exploit participants or populations for individual gain, nor for gain by their employers. Research of a population should always be for the benefit of the population, or of those that they serve.

Deception and Secrecy

Persons should know when they are to be participants in research, be asked for their informed consent, and be entitled to withdraw at any time.

Confidentiality

Participants and informants have the right to remain anonymous. Their privacy should be protected.

General

Researchers should inform themselves about cultural, religious, gender and other significant differences in the

research population, and be sensitive to and respect these differences.

Participants in research should be involved in the planning and conduct of the research and in preparation of findings, wherever this will be of benefit to them and will not jeopardise the efficacy of the research.

Research on socially disadvantaged groups should be designed for their direct benefit.

Researchers should take account of the volume of research being published about a group — research likely to be reinforcing of prejudice against disadvantaged groups should not be undertaken.

Before deciding whether or not to publish, the researchers should consider whether injustice will result from publishing or from refusing to publish the results or part of the results.

The Australian Code then urges practical commitments which express the principles already summarised. These include urging educational researchers not to disrupt institutional life and to observe institutional protocols including negotiating access. Researchers are expected to work on behalf of education, to protect the reputation of educational research and researchers, and to acknowledge the different approaches used to realise different purposes. It is assumed that there is community agreement that research is a desirable human practice and that enquiry and honesty coupled with concern for others, especially the least advantaged, are inherently desirable. Educators and educational researchers must sustain that respect.

‘First, do no harm’ expresses an aspiration difficult to realise in practice. One account by MacDonald (1977) of a teacher explaining her teaching as it was documented on television showed how destructive apparently innocuous exposure can be. Her career and health suffered badly as viewers discovered her identity and harassed her. Changing and extending representation of people, practices and situations can be informative and enlightening, but research can create exposure with damaging effects. The danger is that such effects can be frightfully difficult to predict. My experience shows that strict ‘principles of procedure’ afford little protection in the absence of participant goodwill (McTaggart 1990).

The codes’ encouragement to researchers to increase participation in research processes is important recognition of participant vulnerability, though participation alone cannot address all potential risks. Indeed some kinds of participation may well elevate them. Some researchers regard active participation by informants or respondents as jeopardising some research. In such cases, ethics guidelines may describe other appropriate approaches to harm prevention.

Participation as Ethical, Political and Epistemological

The Legacy of John Dewey

The joining of ethical, political and epistemological principles is evident from the beginnings of modern educational research. John Dewey’s work is a prominent example which introduces key ideas about research participation. Dewey was the first twentieth century thinker to argue that participation in educational enquiry was a condition for educational reform for a democratic society. He presented his vision for educational research as early as 1910 in *How We Think*, and then again later in *The Sources of a Science of Education*:

The answer is that (1) educational practices provide the data, the subject matter, which form the problems of enquiry. . . . These educational practices are also (2) the final test of worth of scientific results. They may be scientific in some other field, but not in education until they serve educational purposes, and whether they really serve educational purposes can be found out only in practice.

(Dewey 1929, cited in Hodgkinson 1957, p. 33)

For Dewey, enquiry into educational practices was instantiation of the general ‘method of intelligence’ or ‘Complete Act of Thought’ or ‘CAT’ (Broudy 1981, p. 4; Dewey 1910). As Broudy (1981) went on to argue, the importance of the method of intelligence for schooling lay in the claim that everyone could bring it to bear on questions of fact and value. Indeed, by making students adept at the use of the Complete Act of Thought, it was argued that schools could produce and sustain a rational and democratic society.

Dewey’s demystification, domestication and democratisation of the scientific method challenged the exclusivity of research in the academy. In any democratic society it was essential that ordinary citizens could join with professionals in respectable programs of enquiry and reform. Increasing participation has long been a theme in educational research ethics.

Democratisation of Evaluation

In this context, arguments emerged for democratization of evaluation research to counter the strong accountability thrust of psychometric approaches to program evaluation. Explicit ethical commitments in educational research particularly emerged during the post-Sputnik era. Bureaucrats wanted to know which curriculum packages ‘worked’. Though not always as simple as it seemed (Walker and Schaffarzick 1974), knowledge about programs now recognized different stakeholders’ needs.

'New wave evaluators' in Britain and United States, for example (Parlett and Hamilton 1976; MacDonald 1976; Jenkins et al. 1979; Stake 1967, 1975, 1978; Walker 1980) advocated respect for stakeholders' views. Unlike much educational research at that time, program evaluation was intended to accomplish immediate reflexivity — accountability for large-scale state intervention — what to fund and what not to. Evaluators became 'middle dogs' sponsored by 'top dogs' to bite 'underdogs'! Potential threats to people involved in education systems were obvious, but more naturalistic portrayals of programs sometimes only changed risks to those of exposure, particularly of the least powerful participants (McTaggart 1990; MacDonald 1977). Democratic aspiration and participant protection inspired widely used 'principles of procedure' (Kemmis and Robottom 1986). These suggested more than rules of engagement to keep researchers and evaluators at bay. If participants could be trusted informants, why not encourage active participation in other aspects of research too?

Participation and Its Ethical Implications

Participation presents myriad ethical dilemmas because it assumes many guises. One approach to enquiry that places priority on participation is participatory action research. This approach creates participation of quite different kinds. It includes participation in research, and also participation of people involved and affected to make social practices in which they are engaged more just, informed, rational, reasonable, coherent, satisfying and sustainable. This means supporting people to change their practices — making participation in research only part of a repertoire of activities. This complexity raises ethical dilemmas only hinted at in other approaches to research. Changing practices means dilemmas are inadequately captured by the concept of 'ethics' alone. Accordingly, we can use ethics in participatory action research to raise more general issues. A key to further understanding is its extended idea of participation.

Ethical Complexity in Participatory Action Research

As previously mentioned, participatory action research aims to make social practices more just, informed, rational, reasonable, coherent, satisfying and sustainable. Distinctive participatory practices and ethical commitments towards these ends have been embedded in participatory action research activities since it emerged. Participants in participatory action research conduct these activities:

- research around shared concerns arising in their practice,
- self-reflection about their concerns,

- self-reflection about what to do in their respective situations, and
- creating ways of working together which make the three activities above possible.

Each of these activities is designed to discipline the human experience. They entail and expose more diverse ethical issues than other forms of research, qualitative and / or quantitative. Cross-cultural participatory action research compounds complexity immeasurably (McTaggart 1993). In what follows, I examine the aspirations of contemporary, critical participatory action research by analysing the four key disciplinary activities and suggest some typical ethical dilemmas for each aspect. All educational research involves epistemological, political and material and ethical positioning, but increasingly evident will be the limits of ethics as a dominant point of reference.

Limits of Ethics

Despite significant diversity among approaches, participatory action researchers have explicitly articulated the epistemological, political, cultural and ethical positioning embodied in their work (for example, Groundwater-Smith and Mockler, 2007; Weis and Fine, 2004; Carr and Kemmis 1986, 2005; Kemmis and McTaggart, 2000, 2005; Elliott 1991, 2005; Fine and Torre 2004; Kemmis and McTaggart 1980). Most forms of participatory action research are alert to the political economy of knowledge production and distribution, and to the risks of bringing about changes in practice. Ethical considerations do not cover it all and university research ethics approval largely misses the central dilemmas of participatory action research. Fundamentally, ethics approval is still steeped in problematic conceptualisations of the relationship between researcher and researched described 25 years ago:

When the experimenter-subject dyad is regarded as paradigmatic and normative, then ethical analysis becomes impoverished and those who wish to conduct ethically responsible research find themselves without guidance, while being themselves subjected to a regulatory process that may inflict a moral wrong on them.

(Wax 1982, pp. 33–34)

I doubt research ethics committees can be expected to engage the real complexities of ethical action research. They start from the wrong place. First, they are commissioned to focus on research, not other social practices. Second, their charter is typically based in ethical considerations ahead of epistemological and political issues. On both counts, the central dilemmas of participatory action research are out of ethics committees' legitimate and feasible reach. Herr and Anderson (2005) recognised this in their useful guide to action research dissertation writing, but fall hostage to diverse definitions of action research and to institutional constraint — forced to distinguish between (university)

Table 61.1 Perspectives and research implications for the study of practice

Perspective	Focus		
	The individual	The social	Both: Reflexive-dialectical view of individual-social relations and connections
Objective	(1) <i>Practice as individual behaviour</i> : Quantitative, correlational-experimental methods. Psychometric and observational techniques, tests, interaction schedules.	(2) <i>Practice as social and systems behaviour</i> : Quantitative, correlational-experimental methods. Observational techniques, sociometrics, systems analysis, social ecology.	
Subjective	(3) <i>Practice as intentional action</i> : Qualitative, interpretive methods. Clinical analysis, interview, questionnaire, diaries, journals, self-report, introspection	(4) <i>Practice as socially-structured, shaped by discourses and tradition</i> : Qualitative, interpretive, historical methods. Discourse analysis, document analysis.	
Both: Reflexive-dialectical view of subjective-objective relations and connections			(5) <i>Practice as socially- and historically-constituted, and as reconstituted by human agency and social action</i> : Critical methods. Dialectical analysis — reflexively combining multiple methods — participatory action research.

‘researcher’ and (other) ‘participants’, something participatory action research actively disavows. The best arbiters of ‘ethical practice’ in all four activities which discipline participatory action research will usually not be a committee of experts established in a university.

The ethical commitments of participatory action research have evolved over the last century (Buckingham 1926; Altrichter and Gstettner 1997; Lewin 1946, 1952; Carr and Kemmis 1986; Noffke 1990; McTaggart 1991). An Australian guide, *The Action Research Planner* (Kemmis and McTaggart 1988; also Carr and Kemmis 1986), a version of which first appeared in course materials for students at Deakin University in Geelong, Australia in 1979, adapted its ‘principles of procedure’ from the democratic evaluation literature. Principles of collaboration, negotiation, participation, openness, authorised access and the negotiation of accounts with participants express now familiar ethical exhortations about procedure for educational researchers.

One idea was particularly salient — increasing emphasis on participation in all aspects of participatory action research. That evolution reflected another change, less emphasis on methodological sophistication in research and more emphasis on epistemological and political concerns, that is, focusing on knowledge more useful in guiding action in a specific setting. Informing and disciplining anticipated changes required new forms of engagement for participants (Kemmis and McTaggart 2005). (Versions of those principles can be accessed elsewhere: McTaggart 1989, 1991; Kemmis and McTaggart 2000. The *Planner* remains a useful practical guide, but is now dated (Kemmis and

McTaggart 2000, 2005). *Planner* principles were later embedded in commitments for participatory action research which entailed much more than ‘procedure’, Carr and Kemmis 1986; McTaggart 1989; Kemmis and McTaggart 2000, 2005).

Key features of critical participatory action research have been described by Kemmis and McTaggart (2000, 2005). I will extend that discussion and link the four ‘disciplines’ of critical participatory action research with ethical dilemmas typically confronted by participants. Rejecting the idea that traditional disciplines are primary sources of understanding in educational research does not mean abandoning rigour or discipline (Kincheloe and Berry 2004). Needed now are new approaches to disciplining social enquiry, self-reflection — individual and collective, and social action too.

In *The Sage Handbook of Qualitative Research* (Kemmis and McTaggart 2000, 2005), we argued that social research has employed impoverished views of practice as an object of study, and that it was necessary to understand practice in multiple ways. Social practice can be viewed from five perspectives, each implying different research approaches (Table 61.1). Each approach contributes to understanding. We argue that the reflexive-dialectical perspective, integrating the others and their relationships to each other, understands practice in ways appropriate to transforming it. This perspective, and its research implications are summarised in the bottom right corner of Table 61.1. If we understand practice as socially- and historically-constituted and reconstituted by human agency and social action and informed by critical social science we can articulate a

view of action and research which achieves the aim of participatory action. Theoretical underpinnings of this view of research are critical theory and critical social science.

All four research approaches defined by objective, subjective, individual or social dimensions confront two common problems — representation and intervention — each laced with ethical, political and epistemological issues. Each approach addresses these issues differently, and given demonstrable goodwill, the typical demands of research ethics committees can be met. However, viewing practice, participation and action research together in the manner summarized in the fifth cell means intellectually, emotionally, politically demanding and ethically distinctive work. The four activities to which we bring rigour and discipline to through cycles of planning, acting, observing and reflecting are:

1. **Objectification of experience:** considering the theoretical interpretations of facts and observations — in Habermas's (1974, p. 32) terms, 'the formation and extension of critical theorems, which can stand up to scientific discourse' aiming at 'true statements'.
2. **Subjectivity – affect/feeling/dissatisfaction:** establishing the links between genuinely felt concerns and their theoretical significances — in Habermas's terms, 'the organization of processes of enlightenment, in which such theorems are applied and can be tested ... by the initiation of processes of reflection ... within certain groups' aiming at 'authentic insights'.
3. **Subjectivity – agency/action/politics:** establishing the moral sureness and political viability of plans for change — in Habermas's terms, 'the selection of appropriate strategies, the solution of tactical questions and the conduct of the political struggle' aiming at 'prudent decisions'.
4. **Participation and social relations for rigour** through agreed principles to effect 1–3 — in Habermas's terms, the creation of 'public spheres' to establish 'communicative space' and 'communicative action'.

Objectification of Experience

The Task

Objectification of experience is fundamentally the 'research' aspect of participatory action research — constituting and interpreting 'facts of the situation' including observations of how others are involved and affected. In critical participatory action research the perspective taken on practice is that it is socially and historically constituted and reconstituted through human agency and social action. This is the praxis of a critical social science.

Objectification of experience is not enquiry governed by methodological precedents, rules, procedures and canons. Nor is it the exclusive prevail of specialist researchers. Its claim to validity lies in dialectical relationships among the epistemological frames of participants. The information it seeks, values and analyses is not solely aimed at distillation of truths, but must also be educative and reflexive, having the capacity to inspire, challenge, shock or motivate people to change. In other kinds of research, curiosity is enough to motivate further exploration. Curiosity is important in participatory action research but it is never the sole motivation. Informing action is always a prior concern. As participants work through successive cycles of change and learn as they go, the objectification of experience asks, 'Which interpretation(s) most comprehensively inform what we plan to do next?'

Ethical Dilemmas

- Who gets to know what about whom and when? This dilemma has several illustrative aspects. It is ethical in that it raises questions about privacy and the right to know, for example. It relates to the political economy of knowledge production and distribution — as knowledge shifts around an organization so too does power. There are material aspects too. Knowledge about an organization and people in it can be rewarding in the competition to for resources, for promotion, and for the aggregation of status.
- As participants change their roles and initiate enquiry, circumstances change. There is reflexivity associated with simply asking questions, taking of notes, meeting with different people, observing of meetings — catching others by surprise as participant agendas change a little in the setting.
- Selective collection and interpretation of information, lack of impartiality, being too safe, too risky, uncontrolled disclosure.
- Which interpretive perspective(s) are to be used? For example, do participants see themselves first as women, Indigenous Australians, Australians, victims of drugs, of abusers ...?
- The ease with which articulate members can dominate discussion with critical theory, local perspectives, or sheer persistence.
- Hidden agendas, tokenism, surface compliance with principles but lack of goodwill.
- In cross-cultural settings, germane but undisclosed knowledges, for example, secret men's and women's business (sodomy of children in traditional initiation practices; questioning elders when you are expected to wait until told. ...).

- Strategic use of information/interpretation to inspire, challenge, shock or motivate people.
- The pedagogical dilemma of when to tell, how much to tell, how soon? Not frightening people with the scale of the problem perceived by some participants — for example, a perceived post-colonialist, feminist, queer, class agenda, or similar.

Subjectivity – Affect/Feeling/Dissatisfaction

The Task

The sense in which subjectivity is used here refers to humans as knowing, feeling and acting subjects. Emphasis here is placed upon the affective or ‘feeling’ aspect and participatory action research commitment to exploring people’s satisfactions, dissatisfactions, feelings, concerns and blind spots. There are two related elements in this emphasis to the disciplining of subjectivity. The first refers to clarification of affective states, the second relates to interpretation of their meaning. It is important to differentiate between authentic disaffection and unreasonableness, madness, selfishness and dysfunction. However, it is essential to recognize the danger in dismissal of views and the individuals through attribution using such labels. Disciplined and informed self-reflection are paramount.

The second element, typically occurring with the first, involves recognizing shared attitudes and dispositions. This assists emergence of group identity and possibilities for collective action. It also allows recognition that issues are not idiosyncratic — issues some have addressed in other cases might allow extrapolation (or ‘naturalistic generalization’, Stake 1995) to cases participants are living through. Further, theoretical understandings, possibly derived from similar or different cases, can be useful to interpret the origins of problems and to formulate plans informed by shared experience. Engaging theoretical understanding by distilling and harnessing feelings into shared understandings — cognitive and empathic — is described in Habermas’s earlier work as the ‘organization of enlightenment’.

Ethical Dilemmas

- Disclosure and confidentiality. Disclosure and interpretation of feelings, especially those not previously aired may create significant risk. This kind of information also impacts on the political economy of knowledge production and distribution. Knowledge of feelings and recognition of shared concerns have ethical, political and material aspects possibly making people even more vulnerable or powerful than ‘factual’ knowledge.

- The T-Group delusion — ‘you show me yours and I’ll show you mine and we will then just accept each other’ is an ethical minefield for disclosure. Moreover, it raises issues about the authenticity of participants’ commitments to others and to changes in practices.
- Objectifying ‘on behalf of others’ their individual skills, understandings and values self reflectively, individually, without ‘data’ about their situations and the situational nature of their competence.
- Engineering of interpretation — undue influence, intended or unintended, of certain participants or points of view — imperialisms: the *imperialism of the theoretic* where ideas unduly legitimated by academic endorsement dominate; the *imperialism of populism* where a kind of mob rule dominates over careful and informed deliberation; *imperialism of group solidarity* where authentic ideas are rejected or surrendered in a faux effort to forge consensus.
- Susceptibility to charisma on the one hand, or to shyness on the other denies authentic participation. Individuals may enact charisma or shyness, others may not intervene — a dilemma on the cusp of ethics and politics of participation.
- Susceptibility to naiveté — pretending too much or disowning personal responsibility by believing too much too easily or too lazily.
- Muting or exaggerating the scale and nature of genuinely held belief.
- Dismissing ‘wild ideas’ which with thoughtful interpretation might create opportunities to see things as an outsider or from another difficult to engage, point of view — a lost opportunity for ‘border pedagogy’.
- Importing or influencing other views unduly through theory (distilled from other cases) or through cases themselves — an opportunity for participant learning if done reasonably and authentically, but also an opportunity for manipulation.

Subjectivity – Agency/Action/Politics

The Task

This is the ‘action’ component of participatory action research and refers to the acting aspect of the feeling, knowing acting subject. It involves disciplining political agency — ensuring that plans for change are considered, subjected to critique by informed others to ensure that what is planned is wise and prudent in the circumstances of each participant. Disciplining this aspect of subjectivity builds on emerging understandings, cognitive and affective, to plan action in the individual, collective, institutional and community domains — what Habermas called ‘the conduct of the political struggle’.

It is the area of participatory action research where participation is most crucial and commitment to participation by all those involved and affected must be ensured. There is risk involved in changing one's own practices, and individuals must opt in only with full understanding of their own situations.

As with other activities described above, there is overlap. Here planning of action must include gathering of more information about the practice, about effects change is having and about the situation as action transpires. Planning for further data gathering includes the extension of the theoretical perspectives and knowledge of other cases, to inform action as it evolves.

Ethical Dilemmas

- Over-interpreting relevance one's own case or knowledge in encouraging and advising others
- Hounding others to act
- Warning others not to act
- Failing to recognize when skills understandings and values of individuals may be out of kilter with the boldness of their plans
- Legitimizing risky action by shifting the discourse about it to an apparently powerful one
- Compromising 'collective action' by holding out for ideological soundness at the expense of reasonableness
- Accepting paralysis in the quest for ideological soundness
- Overestimating the capacity for theory to specify and guarantee action, safety and success
- Overestimating the coherence of the thematic concern and 'group solidarity' — failing to recognize individualism masked by the abstraction of 'project' nomenclature
- Urging risky strategic action by individuals to better inform the group
- Group solidarity — exclusivity, championing self-serving causes, institutionalizing 'the group'
- Confusing prudence with quietism — activity with progress.

Participation and the Conditions for Rigour

Participatory action research is not simply a process where groups of people get together to share their thoughts, try out something new, and meet later to chat about how things went. It requires rigour — a practical and theoretical basis for disciplining participation, creating forms of life which make the three preceding activities authentic, ethical, robust and capable of producing persuasive exemplars for others (Kemmis and McTaggart 2000, 2005).

Concepts for Participation as a Discipline

Disciplining objectification and the two aspects of subjectivity will be familiar to participatory action researchers. The fourth discipline, establishing the participatory practices which make that work possible, may be less familiar. Many action researchers see the need to articulate the concept of participation (Reason 1994). Critical social science contributes a helpful conceptual repertoire to extend this. The Habermasian (1984, 1987) concepts of 'communicative action', 'communicative space', and the 'public sphere' help to define a new approach to critical participatory action research and the conditions to support it.

Communicative Action and Communicative Space

Using Habermas (1984, 1987), Kemmis and McTaggart (2000, 2005) described communicative action as conscious and deliberate effort among participants:

- to reach intersubjective agreement as a basis for
- mutual understanding in order to
- reach unforced consensus about what to do in their particular situation.

The questions which establish the validity of practices constituting communicative action are:

- Are participants' understandings of what they are doing comprehensible to them?
- Are they true, accurate in accord with what is known?
- Are they sincerely held and stated (authentic)? And
- Are they morally right and appropriate in participants' circumstances?

These commitments to communicative action create conditions to support participatory action research. Communicative action also:

- opens communicative space between people
- builds solidarity, and
- underwrites understandings and decisions with legitimacy.

A crucial feature of participatory action research requires that it be considered legitimate by participants. Legitimacy can be achieved through communicative action and is only guaranteed when people are free to decide individually, for themselves:

- What is comprehensible to them
- What is true in the light of their own and shared knowledge
- What is sincerely held and truthfully stated (authentic), and
- What is morally right, appropriate and proper in participants' circumstances.

Note here that as we define the work of participatory action research we put foremost *participants'* understandings, needs and willingness to act as criteria for legitimacy.

How do we organise the practice of participation to accomplish legitimacy? Kemmis and McTaggart (2000, 2005) argue that legitimacy arises in ‘public spheres’ (Habermas 1996). The features of public spheres express deep ethical commitments, again in concert with political and epistemological commitments.

Ten key Features of Public Spheres

Public spheres are:

1. **Actual networks of communication among participants:** face to face communicating with each other in other ways
2. **Self-constituted – voluntary and autonomous** and different to formal systems of government or institutions. People gather to explore a particular problem or issue — that is, around a *theme* for discussion — forming communicative spaces.
3. **Come into existence because of legitimation deficits:** because people share doubts, concerns, problems or unresolved issues about the legitimacy of laws, policies, practices, plans or perspectives.
4. **Constituted for communicative action and public discourse:** a similar orientation to communicative action with the aim of mutual understanding and unforced consensus about what to do.
5. **Inclusive and permeable:** attempts to create communicative spaces that include not only the parties most obviously interested in and affected by decisions, but also people and groups peripheral or marginal to (or excluded from) discussion in relation to the themes.
6. **Communicate in ordinary language:** seek to break down the barriers and hierarchies formed by specialist discourses and modes of address characteristic of bureaucracies that presume a ranking of the importance of speakers and what they say in terms of their positional authority (or lack of it) — weak distinctions between ‘insiders’ and ‘outsiders’ and between people who are relatively disinterested and those whose (self-) interests are significantly affected by the topics under discussion.
7. **Presuppose communicative freedom:** participants are free to occupy (or not occupy) the particular discursive roles of speaker, listener and observer, and they are free to withdraw from the communicative space of the discussion. Participation and non-participation are voluntary.
8. **Generate communicative power:** create the possibility that communication networks constituted for public discourse will generate *communicative power* — that is, that the positions and viewpoints developed through discussion will command the respect of participants (not by virtue of obligation, but by intersubjective agreement, mutual understanding and unforced consensus about what to do — in other words, by the force of argument alone) — creating *legitimacy* in the strongest sense — the shared belief among participants that they can and do freely and authentically consent to the decisions, positions or viewpoints arrived at through their own participation in public discourse.
9. **Indirect impact on social systems:** Public spheres do not affect social systems (like government and administration) directly; their impact on systems is more *indirect*, and mediated through systems of *influence* (like voluntary groups and associations in civil society). Thus, the media and political parties would *not* ordinarily qualify as public spheres.
10. **Often associated with social movements:** frequently arise in practice through (or in relation to) the communication networks associated with *social movements* — that is, where voluntary groupings of participants arise in response to a legitimation-deficit, or a shared sense that there is a social problem has arisen and needs to be addressed.

These ten features of public spheres describe distinctive ethical commitments to communication, voluntarism, authentically sharing concerns and purposes, desire for consensus, inclusion and welcome, educative intent, trust, teamwork, community and actionism. Attempt to couch all of this in a discourse of ethics risks distortion and reductionism. Public spheres require more than ethics.

The features describe a space for social interaction in which people strive for intersubjective agreement, mutual understanding and unforced consensus about what to do, and (the new element identified by Habermas in *Between Facts and Norms*, 1996) in which legitimacy arises. These are the conditions under which participants regard decisions, perspectives and points of view reached in open discussion as compelling for — even binding upon — themselves. Such conditions are very different from many other forms of communication — for example, the kind of functional communication characteristic of social systems (which aims at achieving particular ends by the most efficient means) and most interest-based bargaining (which aims at maximising or optimising self-interests rather than making the best and most appropriate decision for all concerned). The conditions constitute a fourth discipline, ways of thinking and acting which make it possible for people to study their experience, analyse their reactions to their own and others’ practices, and plan ways of bringing about authentic changes in practice.

Ethical Dilemmas in the Formation of Public Spheres

The over-arching ethical dilemma in public spheres is disingenuous commitment — to personal participation and to

authentic participation by others. Failure to commit to authentic participation can be masked by ambiguities in the concept of participation. The term 'participation' involves a raft of meanings and practices, many of which are misleadingly satisfying. Different levels of participation include:

Attendance is the shallowest participation. It is 'technical', suggesting mere involvement, perhaps cooption (in legal discourses 'involvement' unhappily suggests incrimination). However, people have to be there to learn and to exert an influence, so attendance means something.

Being there when decisions are made implies a level of engagement without active participation, but here too mere technical participation in a decision, the simple raising of a hand perhaps, may mean full comprehension of the substance of the decision, or blind conformity.

Knowing what is going on is a politically weak form of participation, but is obviously a potent precursor to doing anything else beyond being involved as an audience or making up the numbers.

Psychological engagement means real identification with issues being discussed, but can be individualistic and self-interested and does not imply the possession of values, understandings or skills necessary to change personally or to influence events.

Engagement in the reformation of personal and institutional practices implies a high level of participation, but may still be fettered by surface understandings about how skills, understandings and values are framed by broader social and cultural conditions, to do with class, gender or ethnicity, for example.

Engagement in changing the socio-cultural, hegemonic, discursive and structural elements which frame discussion, ultimately leading to theoretically informed, recursively conceived and prudent changes in practice is the most encompassing expression of participation.

Failure of individuals to engage the higher levels of participation subverts the role of 'public spheres' in participatory action research. Access of all participants to the highest levels of activity in a public sphere is a right, a collective responsibility, and an ethical commitment.

One well-grounded attempt to establish an ethical framework that covers the tasks described above has been made by Groundwater-Smith and Mockler (2007). They have drawn on conventional research ethics and literature about the 'ethical professional' to propose 'a series of broad, overriding 'ethical' guidelines for educational 'practitioner research' (p. 205). Their ideas are consistent with the general aspirations outlined in this chapter, but for participatory action researchers the devil is always in the detail of the situation. That is why it is helpful to look at the sub-practices of participatory action research and the dilemmas they

produce in practice. Real events affirm the diversity, complexity and confrontation of ethical questions, within participatory action research, and throughout all forms of social practice. Ethics do not exist to generate principles, but to raise questions for everyone about what to do in real situations.

Conclusion

The issues and proposals outlined here summarize much of what has been learned by many participants in educational research over several generations. The focus on participatory action research reveals issues that are distinctive, not exclusive to that approach or the theoretics that inform it. What facts about educational lives are persuasive? How do people feel about what is happening to them in research, their lives and professional practice? What do they feel committed to do to improve education? The conditions under which people believe any of these can be explored are issues for all researchers. The key to ethical research practice is embodied in the further practical and theoretical exploration of these issues and proposals. There are no theoretical, practical or procedural guarantees for ethical research practice. The pitfalls of reforming educational practice are too numerous and unpredictable for that. This is of course another way of saying that ethics automatically create a 'theory-practice gap'. The difficulty with ethical frameworks, principles of procedure and indeed principles of participatory action research is that they may not and perhaps cannot provide assured help in the specifics and turmoil of changing practice.

The ethical dilemmas described for each of the four activities of participatory action research illustrate the problem. Real dilemmas arise in the very specific interactions of practice, and principles do not define what to do. The dilemmas faced by individuals point to the central problem to which participatory action research offers a more general solution. Because social practice by its very nature is the aggregation of individual efforts, the point is to have individuals participate in public spheres that enable them to engage individual and social aspects of their lives in disciplined ways. This does not involve the *implementation* of principles or frameworks invented and distilled from other people's experience. Rather it involves the *interpretation* of such ideas informed by all of the features of the situations in which practice is constructed and renewed. The fundamental contribution of participatory action research to this discussion is explication of ways to create and sustain the social relations of participation which discipline interpretations of the ideas of others, their own views of their practice and its situation, and what to do to make

their own practice more just, informed, rational, reasonable, coherent, satisfying and sustainable.

Acknowledgements I am grateful to Drs Gina Curro and Nick Szorenyi-Reischl for comments on earlier drafts of this chapter.

Note on Contributor

Robin McTaggart is Adjunct Professor in the School of Education at James Cook University in Townsville Australia. A former high school chemistry and biology teacher he has a long university career in teaching, research and management. He has published on quality assurance, program evaluation and participatory action research across education, management and other professions. Professor McTaggart has also conducted quality assurance audits of several universities, numerous program evaluation and research studies of action research, and related training workshops for several professions in Australia, Canada, Hong Kong, Indonesia, Malaysia, New Zealand, Singapore, Thailand and the United States.

References

- Altrichter H, Gstettner P (1997) Action research: a closed chapter in the history of German social science? In: McTaggart R (ed) *Participatory action research: contexts and consequences*. State University of New York Press, Albany, pp 44–78
- Angell M (1997) The ethics of clinical research in the third world. *N Engl J Med* 337(12):847–849
- Bibby M (ed) (1997) *Ethics and education research*. AARE, Coldstream
- Broudy HS (1981) *Truth and credibility*. Longman, New York
- Buckingham BR (1926) *Research for teachers*. Silver, Burdett, New York
- Caplan AL (1992) When evil intrudes — twenty years after: the legacy of the Tuskegee syphilis study. *Hastings Cent Rep* 22(6):29–32
- Carr W, Kemmis S (1986) *Becoming critical: education, knowledge, and action research*. Falmer Press, London
- Carr W, Kemmis S (2005) Staying critical. *Educ Action Res* 13(3):347–358
- Dewey J (1910) *How we think*. Heath, New York
- Dewey J (1929) *The sources of a science of education*. Liveright, New York
- Elliott J (1991) *Action research for educational change*. Open University Press, Milton Keynes
- Elliott J (2005) Becoming critical: the failure to connect. *Educ Action Res* 13(3):359–373
- Fine M, Torre ME (2004) Re-membering exclusions: participatory action research in public institutions. *Qual Res Psychol* 1:15–37.
- Groundwater-Smith S, Mockler N (2007) Ethics in practitioner research: an issue of quality. *Res Pap Educ* 22(2):199–211
- Habermas J (1974) *Theory and practice* (trans: Viertel J). Heinemann, London
- Habermas J (1984) *Theory of communicative action, vol 1: reason and the rationalization of society* (trans: McCarthy T). Beacon, Boston
- Habermas J (1987) *Theory of communicative action, vol 2: lifeworld and system: a critique of functionalist reason* (trans: McCarthy T). Beacon, Boston
- Habermas J (1996) *Between facts and norms* (trans: Rehg W). MIT Press, Cambridge, MA
- Herr K, Anderson GL (2005) *The action research dissertation: a guide for students and faculty*. Sage, Thousand Oaks
- Hodgkinson JL (1957) Action research — A critique. *J Educ Sociol* 31:137–153
- Jenkins D, Kemmis S, MacDonald B, Verma GK (1979) Racism and educational evaluation. In: Verma GK, Bagley C (eds) *Race, education and identity*. MacMillan, London, pp 107–132
- Kemmis S, McTaggart R (1980) *The action research planner*. Deakin University, Geelong.
- Kemmis S, McTaggart R (eds) (1988) *The action research planner*, 3rd edn. Deakin University Press, Geelong
- Kemmis S, McTaggart R (2000) Participatory action research. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 2nd edn. Sage, Thousand Oaks, pp 567–605
- Kemmis S, McTaggart R (2005) Participatory action research: communicative action and the public sphere. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 559–604
- Kemmis S, Robottom I (1986) Principles of procedure in curriculum evaluation. *J Curriculum Stud* 18(2):151–155
- Kincheloe JL, Berry KS (2004) *Rigour and complexity in educational research: conceptualizing the bricolage*. Open University Press, Maidenhead
- Klein R (1989a) The exploitation of a desire. *Women's Studies Summer Institute and Deakin University Press*, Geelong
- Klein R (ed) (1989b) *Infertility: women speak out about their experiences of reproductive medicine*. Pandora, London
- Lewin K (1946) Action research and minority problems. *J Soc Issues* 2:34–46
- Lewin K (1952) Group decision and social change. In: Swanson GE, Newcomb TM, Hartley EL (eds) *Readings in social psychology*. Henry Holt, New York, pp 459–473
- MacDonald B (1976) Evaluation and the control of education. In: Tawney DA (ed) *Curriculum evaluation today: trends and implications*. MacMillan, London, pp 125–136
- MacDonald B (1977) The portrayal of persons as evaluation data. In: Norris N (ed) *SAFARI Papers 2: theory into practice*. Centre for Applied Research in Education University of East Anglia, Norwich, Occasional Papers
- Marika R, Ngurruwutthun D, White L (1992) Always together, yaka gana: participatory research at Yirrkala as part of the development of a Yolngu education. *Convergence* 25(1):23–39
- McTaggart R (1989) Principles for participatory action research. Paper presented at the 3er Encuentro Mundial Investigacion Participativa (The Third World Encounter on Participatory Research), Managua, Sept 1989
- McTaggart R (1990) Dilemmas in democratic evaluation: politics and validation. In: Goodson I, Mangan M (eds) *Qualitative educational research: methodologies in transition*. University of Western Ontario, London, pp 117–170
- McTaggart R (1991) *Action research: a short modern history*. Deakin University Press, Geelong
- McTaggart R (1993) Dilemmas in cross-cultural action research. In: Colquhoun D, Kellehear A (eds) *Health research: political, ethical and methodological issues*. Chapman & Hall, London, pp 65–96
- Noffke SE (1990) *Action research: a multidimensional analysis*. Unpublished PhD thesis, University of Wisconsin, Madison
- Parlett M, Hamilton D (1976) Evaluation as illumination: a new approach to the study of innovatory programs. In: Tawney DA (ed) *Curriculum evaluation today: trends and implications*. MacMillan, London, pp 84–101
- Plath DW (1976) Review of L. Austin (1975) *Saints and Samurai: the political culture of the American and Japanese elites*. Yale University Press, New Haven. *Pacific Affairs* 49(2):357–358

- Reason P (ed) (1994) *Participation in human inquiry*. Sage, London
- Stake RE (1967) The countenance of educational evaluation. *Teach Coll Rec* 68:523–540
- Stake RE (1975) *Evaluating the arts in education: a responsive approach*. Merrill, Columbus, Ohio
- Stake RE (1978) The case study method in social enquiry. *Educ Res* 7:5–8
- Stake RE (1995) *The art of case study research*. Sage, Thousand Oaks
- Walker D, Schaffarzick J (1974) Comparing curricula. *Rev Educ Res* 44:83–91
- Walker R (1980) The conduct of educational case studies: ethics, theory and procedures. In: Dockerell WB, Hamilton D (eds) *Rethinking educational research*. Hodder & Stoughton, London, pp 30–63
- Wax ML (1982) Research reciprocity rather than informed consent in fieldwork. In: Sieber JE (ed) *The ethics of social research*. Springer, New York, pp 49–70
- Weis L, Fine M (2004) *Working method: social justice and social research*. Routledge, New York

Ethics, Power and Intellectual Virtue: Doing Right in a Diversified Educational Research Environment

62

David Bridges

Abstract

The paper is broadly sympathetic to McTaggart's position on participatory action research, but points, in particular, to three limitations in its treatment of the issues. First, it suggests that McTaggart has broadly assumed that the researcher is in a position of power vis-à-vis the researched and that the ethical precautions are designed primarily to safeguard research participants. However, when researchers are investigating *up* the power hierarchy (e.g. enquiring into powerful arms of government, large corporations or even manipulative and over-protective headteachers) different sets of ethical issues and obligations start to kick in, in which the researcher's obligations such as to public understanding may over-ride obligations towards research participants. Secondly, not all educational research fits the model of participatory action research, nor can it all involve those who are its focus in quite the same way. Historical research and at least some biography have research 'subjects' who are no longer with us. Large population studies clearly cannot engage with participants in the same way as participatory action research. Philosophy, critical theory and discourse analysis stand in different relations again to those with whose writing, policy or practice they engage. All of these carry certain kinds of ethical requirements, but these start to look rather different from those which McTaggart is occupied. Finally, I raise the question of whether the source of the morality of research practice is really to be found in codes of ethical behaviour — especially when these become institutionalised and bureaucratised. Perhaps instead we should be looking to how intellectual virtue is embedded in and cultivated by the practice of our universities?

Keywords

Power hierarchy • Obligation • Intellectual virtue • Ethical code • Truthfulness

Introduction

Robin McTaggart's contribution to this volume provides a rich and fertile starting point for anyone seeking to understand some of the central issues in educational research ethics (McTaggart 2013). He has chosen to focus his attention on participatory action research which plays a role both as an answer to some of the questions about the ethical

conduct of educational research and the source of some new questions. Clearly McTaggart sees participatory action research as having a central role in the wider educational research agenda not only because of the way it brings research into an intimate relationship with practice but also because it generates more equitable relationships between researcher and practitioner and respects all participants' rights to ownership of the knowledge produced through the research process. Along with this, and as if to anticipate what might have been my criticism of some of the less sophisticated versions of such research, he also emphasises the *critical* nature of this engagement and the need for a dialectic relationship

D. Bridges (✉)
Faculty of Education, University of Cambridge, Cambridge, UK
e-mail: db347@cam.ac.uk

among the theoretical frameworks of participants. The ‘insider’ perspective on experience needs challenge and enlargement from outside no less than ‘outsider’ perspectives need informing from the inside (Bridges 2009).

With all of this I have enormous sympathy, so the comments which follow should be regarded as picking round the edge of the central thesis — and in particular looking at ethical issues in the wider and extremely diverse range of educational research traditions — rather than offering any fundamental disagreement.

Researching up the Power Hierarchy

McTaggart primarily addresses educational research that is conducted under hierarchical relationships in which the researcher has the greater power. However research experience is not always like that. I recall one local authority Director of Education explaining to a research team: ‘I buy research like I buy a sack of coal — and when I have bought it I expect to do what the hell I like with it’ (see Bridges 1999, 2003). It was not obvious that in this case the balance of power needed adjustment in favour of the Director of Education even if he was a research participant rather than a researcher. In another instance university researchers were seeking to investigate (among other things) the culture of racism embedded in the training and socialisation of new police officers. Even with the support of the Home Office none of the researchers involved felt the need to redress the balance of power in favour of their participants in the powerfully self confident Police Federation or the Association of Chief Constables. If a research contract with the Ministry of Education proposes to give the Minister the right to deny publication of the research report or to produce a version edited to the satisfaction of the Minister, then we might consider that we have a duty to assert a different set of principles than those that might seek to empower ‘participants’ against the researcher.¹ Even at a more local level there are plenty of research-wise (and public relations-wise) school head teachers who are perfectly capable of placing would be classroom researchers firmly in their (subordinate) place.

¹ These are both examples from the experience of the Centre for Applied Research in Education at the University of East Anglia. The issue of the terms of government research contracts was taken up by a working party of the British Educational Research Association which urged university administrations to insist on a clause in such contracts to the effect that ‘the right to publish independently should not unreasonably be refused’ (Bridges et al. 1988). Some universities sustained this principle for a period of time, though as far as I know what would count as ‘unreasonable’ was never tested in the courts. Universities’ increasingly commercial attitudes towards the winning of research contracts have, I believe, made them less fastidious about the terms under which they are offered.

Research which looks, as it were, *up* the power hierarchy invites consideration of a slightly different set of principles than research which involves participants who are less protected by their positions of power. Such research raises issues to do with the researcher’s obligations to put information of public interest into the public domain, to inform a democratic citizenry, to inform not just educational managers and teachers but the parents of the children in their care. It raises, too, questions about the researcher’s duty to report honestly and with integrity — even if to do so offends those commissioning the research (and results in the loss of future revenue to the institution?). While the researcher might always seek a respectful and personable relationship with research participants, there may well be circumstances in which this relationship is inescapably antagonistic if a researcher is to stand by essentially democratic principles and obligations.

There are also more intimate circumstances in which the researcher’s deference to participants is challenged. McNamee (2002) writes for example about the dilemma of a researcher who has been granted access to a classroom environment under conditions of confidentiality and then becomes aware of an illicit relationship between a teacher and a child. He struggles with what McNamee refers to as the ‘guilty knowledge’ and an awareness that whatever he does or does not do with it will involve some breach of ethical obligation and some harm to participants.

None of these examples contradict the view that the researcher has obligations to participants in the research. They are a reminder, however, that these are not the only obligations and a reminder of the researcher’s service and duties to a wider community. These may require the researcher to adopt a more investigative and even challenging stance towards certain research participants and may require measures (e.g. of institutional support and of contractual conditions) which enhance rather than reduce the researcher’s power in relation to some research participants.

Ethical Obligations in a Diversified Educational Research Environment

One of the remarkable features of the development of educational research over the last three decades has been the segmentation of some of the more established disciplines like sociology and psychology, the addition to these of an enormous range of resources from across the academy, and the hybridisation of these different traditions in an academic world which seems to value originality in methodology as well as or even over originality in the substantive content of research. Thus today educational research journals and conferences include biography, narratives and life history, discourse analysis, neuro-science, philosophy, semantics

and linguistics, large population studies, double blind controlled experiments, history (and ‘contemporary history’), ethnography, phenomenography, economics, ‘thick description’, iconography, research based fictional writing, critical theory (see, on this, my chapter in this Companion on ‘The discipline(s) of educational research’). Some of these methods and methodologies (for example, the construction of life histories) involve participants in ways which make many of McTaggart’s principles and practices readily applicable. Others, for example some biography and all history except ‘contemporary history’ may deal quite intimately with people who are not able to ‘participate’ in the ordinary sense of the term. Others — like philosophy and large population studies do not engage with individuals in the same way. These are not insignificant segments of educational research activity, and yet I do not think they can be approached in quite the way that McTaggart prescribes for participatory action research.

This does not, however, mean that researchers in these fields are free from ethical obligations. There remain, first, obligations to the people that the research is about. A biographer or historian has obligations to the people they are writing about to represent them fairly (rather than to provide accounts distorted to serve perhaps ideological or commercial interests); to provide accurate accounts of what happened (so far as they are able) and/or to acknowledge alternative versions of events; to interpret what people did in terms of contemporary practices and beliefs and not (just) in terms of modern systems of belief; to stick to what the evidence will support, or at least to make explicit the boundary between evidentially supported and more speculative narrative, and so forth.

We might suppose that some of these obligations would become thinner as a researcher moves to realms of educational research which are more removed from accounts of the experience of individual people and deal instead with whole populations or sections of them defined, for example, by reference to social class, ethnicity, gender, their non-participation in higher education or their upbringing by a single parent. However, large scale correlational studies on the relationship between, for example, the genetic characteristics of a large class of people and intelligence or educational achievement — even the very possibility of such studies — can carry huge social consequences, such that researchers cannot enter such territory without long and serious consideration about the possible social cost of their work, whatever the rigour of the research and whatever their findings might be. Researchers in such territory have to weigh carefully ethical considerations to do with, among other things, the possible importation or reinforcement of sexist or racist prejudice, the possibility of feeding such prejudice even if their scientific results did not justify it

and an intellectual commitment to freedom of enquiry and the pursuit of truth let alone prudential considerations to do with their own future in an academic community.

Even what might be thought to be the most abstract and de-personalised forms of educational enquiry like philosophy and de-construction are not thereby freed from ethical concerns. These practices are especially characterised by critique and debate within the educational research community — and while they carry an internal obligation, perhaps, for a critical stance towards one’s peers, this can be executed robustly but, nevertheless, with respect and with consideration for others.

I have so far discussed these different research traditions in terms of ethical principles focussed on the people involved. It is difficult to make sense of the practice of research, however, without attaching to it some form of commitment to another ethical principle, that of truthfulness (perhaps more acceptable than Truth, but see Bridges 1999, 2003) and honesty, and to the discipline (as McTaggart acknowledges) and practices which support these imperatives: accuracy, carefulness, thoroughness, industriousness, rigour — the elements implied in Stenhouse’s definition of research as ‘*systematic and sustained enquiry*’ (Stenhouse 1980, my italics).

On this analysis we reach a point at which general human ethical obligations to be honest and truthful assume a functional role of paramount importance in an academic research environment. Revealingly, these are not on the whole the things that institutional ethical codes focus on (except in some cases around the issue of plagiarism). This is in part, I suggest, because on the whole academic institutions treat these not so much as ethical principles to be respected but as intellectual virtues to be cultivated through their processes of socialisation — and I want to turn to the matter of ‘virtue ethics’ in the next section.

Ethical Codes and Intellectual Virtue

The external institutional development and enforcement of ethical codes of the kind that McTaggart illustrates is one way of regulating the ethical conduct of research. The internalisation of moral principles is another. The cultivation in academics of certain forms of human excellence and their habituation in the dispositions and patterns of behaviour that these forms of excellence require — that is, the cultivation of virtue — is a third. Arguably, the increasing reliance on the bureaucracy of ethical codes and the supervisory activity of ethics committees is an indication of the breakdown of the academic practices which should contribute to the development of internalised moral behaviour and the cultivation of (in this case) academic virtue. Universities are increasingly

preoccupied with bureaucratic systems which, as McTaggart has suggested, have more to do with protecting universities from being sued than defending the interests of the powerless.

The notion of intellectual virtue and its cultivation continues nevertheless to merit attention. I think it is fair to say that we admire the researchers we admire most not just for the content of their published work (though of course this is important) but also for the sort of person they are, the way they conduct themselves in relation to this work and to others with whom they relate. These qualities may have their roots in broader moral virtues which are not specific to the academic life, and I would not go to the stake for the distinction between these and more narrowly intellectual virtues, but there is, of course, a long tradition of writing going back to Aristotle which draws a distinction between the two. Richard Pring reflects this tradition when he describes the moral and intellectual virtues required by research:

The moral virtues would be those concerned with resistance to the blandishments or attractions which tempt one from the research even when the intellectual virtues press one to go on: courage to proceed when the research is tough or unpopular; honesty when the consequences of telling the truth are uncomfortable; concern for the well-being of those who are being researched and who, if treated insensitively, might suffer harm; modesty about the merits of the research and its conclusions; humility in the face of justified criticism and readiness to take such criticisms seriously.

(Pring 2000, p. 152)

I am not sure that the distinction between academic and more widely moral virtues is worth huge attention in this context, though clearly the requirements of research and teaching in higher education call especially into play virtues like honesty, determination and humility which have a wider role to play in life outside the academy. For Dewey the 'attitudes' to be encouraged included open-mindedness, whole-heartedness and responsibility (Dewey 1916). For Hume they included: wisdom, a capacious memory, keenness of insight, eloquence, prudence, penetration, discernment and discretion (Hume 1983). For Montmarquet (1986, 1993) there are three clusters of virtue: intellectual *impartiality*, or openness to the ideas of others; intellectual *sobriety*, i.e. the virtues of the careful enquirer who accepts only what is warranted by relevant reasons evidence and argument; and intellectual *courage*, which includes perseverance and determination.

I am less concerned to promote a particular view of what these virtues are than to enlarge the discussion of research ethics to include consideration of such virtues and hence of the social practices in a university which might contribute to their development. Ethical codes alone will in any case not really provide the assurance which they seem to promise. Reflective accounts by researchers regularly report the problems they were faced with in practice in applying the principles contained in such codes (see, for example, Simons and Usher 2000). Inevitably

perhaps they were faced with conflicts of principle and obligation and with situations unanticipated by those who drew up the codes. In a sense, the more circumstances the codes attempt to anticipate and the more detailed they become, the more they become exposed to such conflicts and the less easily they can guide actual decisions in the field. In the Judeo-Christian Tradition God limited Himself to ten commandments to govern the whole of human conduct and even He reckoned that one of these would probably deal with most situations. The British Educational Research Association is already up to 40 to govern that small segment of human experience which is educational research (see under publications at www.bera.ac.uk). I am rather more attracted to the requirements which Linda Smith suggests a researcher might need to satisfy in approaching a Maori community in New Zealand: 'Is her spirit clear? Does he have a good heart? What other baggage are they carrying? Are they useful to us? Can they fix up our generator...?'

(Smith 1999, p. 10)

I do not want to say that codes have no function, but they need to be employed by people who have, independently of the code, a deeply embedded sense of and commitment to the moral and intellectual values which underpin academic work — and universities should be places centrally concerned with the cultivation of such commitment. Learning to be a researcher involves more than acquiring 'research skills' and satisfying the requirements of the research committee.

Note on Contributor

David Bridges is Professorial Fellow at the Faculty of Education in the University of Cambridge and Emeritus Professor at the University of East Anglia where he was formerly Dean of the School of Education and then Pro Vice Chancellor. David is Honorary Vice President of the Philosophy of Education Society of Great Britain and a Council member of both the British and European Educational Research Associations. He has written widely on philosophical issues in educational research and edited *Ethics and Educational Research* with McNamee (Blackwell 2002). He recently chaired a BERA working group reviewing the Association's ethical code.

References

- Bridges D (1999) Educational research: pursuit of truth or flight into fancy? *Br Educ Res J* 25(5):593–608 (also in Bridges 2003)
- Bridges D (2003) 'Fiction written under oath?' Essays in philosophy and educational research. Kluwer, Dordrecht/London/New York
- Bridges D (2009) Education and the possibility of outsider understanding. *Ethics Educ* 4(2):105–125
- Bridges D, Brown S, Adelman C, Torrance H (1988) What constitutes a fair research contract? Paper presented to British Educational Research Association annual conference, Aug 1988, Norwich
- Dewey J (1916) *Democracy and education*. Macmillan, New York
- Hume D (1983) *An enquiry concerning the principles of morals* (ed: Schneewind JB). Hackett Publishing, Indianapolis
- McNamee M (2002) The guilt of whistle blowing: conflicts in action research and educational ethnography. In: McNamee M, Bridges D

- (eds) *The ethics of educational research*. Blackwell, Oxford, pp 129–150
- McTaggart R (2013) *Evolving ethics of educational research*. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 457–469
- Montmarquet JA (1986) Epistemic virtue. *Mind* 96:482–497
- Montmarquet JA (1993) *Epistemic virtue and doxastic responsibility*. Rowman and Littlefield, Lanham
- Pring R (2000) *Philosophy of educational research*. Continuum, London/New York
- Simons H, Usher R (2000) *Situated ethics in educational research*. RoutledgeFalmer, London
- Smith LT (1999) *Decolonising methodologies: research and indigenous peoples*. Zed Books, London
- Stenhouse L (1980) *What counts as research?* Unpublished mimeo. CARE Archive, University of East Anglia, Norwich

Part V

Representing Research in Education

E. Paul Hart

Abstract

The purpose of this Part of the *Companion* is to sketch conditions for thinking about the (im)possibilities of mimesis, that is, how we think we represent the world in words and actions. Faithfulness in representation is perhaps not as straightforward as some would like it to be in educational research. The recourse in the social sciences more generally is much more to the philosophical than scientific, and hence a politics of inquiry has evolved around methodologies and methods in educational inquiry. Researchers of education are challenged to look beyond assumptions of a unitary epistemology and must now learn how to find their ground within a complex of highly contested onto-epistemic positions. As such, representation becomes a crucial issue where research in education involves bridging or respecting incompatibilities of world and words about educational thought and action, expressed through interpretation. Contributors to this Part discuss their struggles to become more conscious and reflexive in addressing concerns of representing education across genres that interact in complex ways within and beyond theoretical perspectives. Although questions remain, what seems important in times of paradigm proliferation is not so much what the changes are, but how we think about them within, and as, researching education.

Keywords

Crisis of representation • Reflexivity • Paradigm • Politics of inquiry • Epistemology

This Part of the *Companion* addresses a complex question, namely: Has the mainstream of educational research become too enculturated into particular understandings of what counts as research, what research represents, or indeed, and how research is to be (best) represented?

Examples of studies to which novice researchers are exposed are often selected to include those that are written in a rational, distanced writing style, primarily chosen for didactic purposes; put bluntly, to educate, emulate or avoid. Yet as researchers roam ever further in academic literatures, experiences and thinking, they encounter an array of possibilities, questions and debates about research quality

across diverse genres of inquiry. Frustration on the part of the novice and experienced researcher may soon follow: not only by the choices confronting their theorizing and practice but also by the debates: where to begin, why continue, will it ever end, where are we – scratch - where am I in all this . . .?! Readers of research routinely encounter justifications that lend support to each and every approach (technically, pragmatically, critically, postcritically . . .) as well as principled disagreements (amongst others) about the purposes, processes and values of what is supposed to be a worthwhile set, if not *procession*, of approaches to inquiry. Troubles intensify from other quarters, particularly when research practitioners try to rationalize their work with that on the meaning and sense-making argued to be required from outside their ‘field’, ‘paradigm’, ‘discipline’ or ‘episteme’ as creating an ‘intimate distance’ between ‘researcher’ and ‘researched’. Positioning and positioned thus, an inevitable query arises: whether

E.P. Hart (✉)
Faculty of Education, University of Regina, SK, Canada
e-mail: Paul.Hart@uregina.ca

educational researchers should cede the arguments of philosophers, historians, anthropologists, sociologists . . . or some 'other' about quality research, if at all?

What we are confronted with is recognizing that what, how and why some represent their research about education is not necessarily sacrosanct, for today let alone for tomorrow. This can deepen the destabilization, if the abiding sense is that something has got lost in the translation. Several decades ago, John Lofland (1971) remarked that sociological researchers require not only abilities to interpret, synthesize and tell, but also by the very necessity of interaction, an ongoing commitment to understanding and learning about how to convey meaning. In terms of qualitative research, its practitioners are interested in forms of writing, experience and performance that appear congruent with their own and their participants' understandings of the research endeavor, broadly conceived. And so the argument and question forms: how does what we choose to write or to represent, in whatever ways possible, something of the complexities of the inquiry process? Stretch it and flex it: how are we, as researchers, able to portray the complexity of the world, of people in place and time? Does this inevitably depend on the insights that we are able to see and convey, again in whatever form they must take to provide openings for learning and building shared meanings? In other words, recognizing the process of abstraction at play, purposes and forms of representation in educational research must be addressed in the *Companion*.

Backtracking again, Polkinghorne (1997) argued that the broader purposes of social science research is to produce knowledge and understanding of the 'human condition'. If, for example, narrative accounts of educational activities, identities and practices are appropriate forms of expression for such research, then representation is a fundamental feature – and problematic – of social science research. The tenacity and power of conventional research approaches notwithstanding, appreciating the nature of knowledge about education and its validation across diverse genres of qualitative inquiry has undergone considerable shifts, such that knowledge statements are ever likely to be understood and represented as always, and nothing less than, human constructions.

Research reports consciously informed by this understanding of representing knowledge about education may be presented as narrative accounts in ways that represent the pragmatic reasonableness of their knowledge claims (Polkinghorne 1997). Within the current climate of educational research, even as all academic researchers may claim some form of authority in their research writing and performances, it remains though that onto-epistemic shifts have legitimized, and at the same time troubled, new textual forms, as well as more reflexive ways of theorizing than is the convention within foundational research (see McWilliam

1997). Thus, within the social and human sciences indexed to educational research, we too now have what some have termed 'the crisis of representation'.

This Part of the *Companion*, in a fairly skeletal way, illustrates some of the tensions and contradictions that exist for researchers of education in dealing responsibly with such issues. These include methodological problems (e.g., the relationship between observation or interaction and representation) as well as subsequent problems of assessment and evaluation of the quality of evidence emerging from diverse approaches to fieldwork and writing. Many questions emerge from these problems, including the following: How do researchers of education critically account for the filtering between raw observational data and what is identified, selected and categorized for presentation? What is recorded or left out, as blank spots or blind spots? How does the researcher or research team describe and deal with the cultural discursive structures that govern his/her, or their, seeing of events, certain social/natural environments and the meaning or significance of particular events? And what about participants' own abilities to see themselves in community and in social (natural) environments in ways that represent themselves or the group? Indeed, there are always already many representational questions that need to be addressed by researchers and participants, in situ as well as reflexively, throughout the various stages of the educational inquiry process, from conceptualization to legitimation.

In this Part of the *Companion*, contributing authors recognize these and many other questions in the negotiation and navigation of philosophical, personal and political concerns as starting points for addressing issues of representation. In each chapter we can see concern about researcher relationships to and with the people participating and, more specifically, concern about relationships fraught with power imbalances, tensions or inequalities. These are clearly philosophical issues that have no solution outside the careful consideration of political and practical strategic decisions, addressed through ongoing critical conversation; and more often than not, we must recognize that these simply will not be put to bed with the full stop of securing publication. For example, strategic decisions may be required in using careful description and archiving of context and documentation of time spent in the field sufficient to recognize the complexities and politics of place and time of research, and the ongoing *and* episodic relationships of 'researcher and researched'. They may also be required in understanding the values embedded in particular moments and trajectories of history (and variations thereof), so that the account achieves credibility and readers can recognize the depth and limits of engagement in matters educational. So too in articulating the conundrums of the inquirer in getting beyond 'otherness', or in recognizing the rhetoric and possibly seductiveness of

others' accounts about education phenomena. And then there is acknowledging the personal and political knots in the messiness of 'capturing' and 'considering' difference over commonality, as well as in depicting the (perhaps) deep emotional resonances constituted within human processes of communication and interaction through education research. It is because there are an almost infinite number of decisions implicated in addressing political and personal issues of representation that we regard this Part of the *Companion* as integral to discussions of quality within educational research.

As with the preceding Parts though, this is never a simple 'us and them' dichotomy, or for that matter, a refusal of the possibility and value of self-study. The point is, in representing others, as researchers of education we must also recognize how we are (and are not) representing ourselves. As Söderström (2005) writes, once researchers give up the notion of *the* truth of the study and the possibility of a faithful mirror-like representation of that truth (as our telling of it) in our research accounts, the best we can aim for is accounting for the incomplete tracings of links between dispersed fragments of the mirror. There are no single, straightforward 'findings' – research that is in some sense, 'researcher proof', like those curriculums that are, in some sense, designed to be 'teacher proof' – because there simply is no vantage point outside the actuality of embodied relationships and experiences, no onto-epistemic researcher privilege of interpretation free of encumbrances (Said 1989). The baggage of our research identity inevitably carries over into our representational accounts. (In fact, Myers (2010) regards this as potentially enriching despite one's 'burdens', representational accounts here being conceptualized as collaborative conversation that includes and requires critical attention the writing and representational process.) In other words, researchers can no longer go innocently in the face of post-critical, post-structural and post-colonial critique that continually asks, Who speaks? For what? and To whom? in both interpretive and collaborative fieldwork.

Of course, representation of interpretive phenomena such as that found in and about 'education' presents many levels and complexity of challenge concerning the meanings of events or the voice of participants and the specific context. Key issues emerge about the researcher's account or the participant's story of the meanings attributed to others' activities and experiences. These concerns are complicated by questions of values and ethics: what to expose or remain discrete about in or as 'the phenomena of education'; for example, how to (re)establish and (re)negotiate previously agreed protocols as research relationships, participants and settings evolve or shift; or how and when to arrange 'member checking' during the generation of materials for publication, so that the 'integrity' of the research is maintained from many points of view. Thus, issues of the values of the

research enterprise, of research ethics, and of researcher responsibility cannot be trivialized. Equally, onto-epistemic communities may differ from one another in significant ways, yet still share similar values and concerns in negotiating meanings. As Linda Tuhiwai Smith (2000) observes, these values and ethics are not simply a matter of what is prescribed in codes of conduct for researchers, but rather a question of cultural inflections and sensitivities, for example, with advice for listening, showing respect, and avoiding flaunting knowledge or trampling the 'manna' of people.

Participatory forms of educational inquiry, informed by critical and feminist scholarship (e.g., Benson and Nagar 2006; Mountz et al. 2003; Pain and Francis 2003) or perhaps owing to practical necessity, often serve as a grounding for community-based inquiry and inquiries attentive to participants' 'social networks'. While personal self-disclosure and reflexivity are increasingly regarded as necessary within these socially forms of inquiry, many educational researchers feel compelled to move beyond personal reflexive accounts of educators, teachers and learners and communities, to address social-political dimensions of consciousness, including how collaborative work is understood and taken up by researchers, participants and other 'stakeholders'. Such work opens up issues of the politics of empirical and theoretical research work, now crucial for both intellectual and practical credibility. Addressing representation issues is no longer simply an academic exercise or a theoretical quandary but a political necessity (Said 1989). Arguably, regarding representational challenges as about the sharing of partial understandings amongst all concerned seems the only plausible way out of the struggles to do interpretive and participatory fieldwork with any sense of integrity. Recognizing our decision-making process as researchers and participants, sharing collaborative conversations, and acknowledging unequal power relations are only part of the work of balancing the academic and practical demands of 'representation'.

Many qualitative researchers have become acutely aware of the need to articulate aspects of researchers' subjectivity and emotion within attempts to understand a battery of concerns surfaced by the terminologies and discourses associated with questions of surveillance, truth, fiction and fantasy, because of the intentions and practices of prior and current approaches to educational research. These complex and layered issues have long since interested post-structural feminist-based inquiry which has fostered a close association between issues of representation and modes and priorities for work to count as 'research'. However authentically representational researchers might try to be, issues of reflexivity concerning one's subjectivity are inevitable in this logic. If the researcher's self, like the participant's, is created in and inflected by fiction, then assumptions about

the value and use of narrative, for example, become more complex and require a working through of the multiple constitution and reconstitutions of the discourses through which 'the subject' is resourced, mobilized, and has been produced.

Walkerdine, Lucey and Melody's (2002) account of post-modern orientations to analysis seems particularly useful in unsettling conventional notions of subjectivity with the possibilities presented by a focus on intersubjectivity. Similarly, exploring possible links between unconscious portrayals of fantasy and desire in ways that critique or complement rational understandings of education phenomena within broadened methodological perspectives may accommodate forms of inquiry in which the personal, social and cultural are researched and juxtaposed to some advantage. Engaging multiple perspectives in these ways, it is argued, enables researchers of education to understand ways in which historically specific subject positions, e.g. as 'teacher', or 'learner' (cf. 'instructor' or 'pupil'), are held in place by unconscious processes that narrative inquiry, for example, can access in the construction and interpretation of research accounts.

According to Coffey (2002), personalized narrative has developed as a significant preoccupation for those interested in socio-cultural representation and reflexivity. There is an increasingly widespread assumption that such narratives represent data that are grounded in both biographical experiences and social contexts, affording a crucial insight into the process and value of critical reflexivity about the phenomena of education. This onto-epistemic proposition has become a hinge point in debates about representation within interpretive, critical and post-critical forms of educational inquiry. There is likely no other way than submitting to an at times, brute, and others, subtle, working through of these debates, in search of some means of intelligibility with which to address issues that characterize and address the crisis of representation. Yet however necessary this process of critical engagement might be, it is not sufficient. Just as narrative textual formats of qualitative representation have been challenged and more self-conscious approaches prompted, an evolving array of new, alternative representational forms have actually emerged to exploit the conventions of naturalistic conversation (or literature or theatre), to draw out the poetical or performative qualities (Coffey 2002) of the everyday, exotic, and ephemeral of education phenomena. These emerging forms of inquiry and representation have been used to represent deeply personal (or sensitive) events, including highly emotional stories which also serve to make the(ir) authors highly visible within the texts. Many examples of experiences of distress and pain in 'pedagogical relationships', such as those related to pastoral and supervisory work in 'educative' settings and scenarios, be those within or beyond traditional

education institutions, encapsulate deeply meaningful experiences for vicarious learning, way beyond a simple reading of models for educational inquiry of, say, classroom practice. In fact, as Adkins (2002) says, it is not enough to problematize the role of the author in producing these reflexive accounts. It is also necessary to problematize the role of the social and human sciences in studies of these aspects of a social, and socialized, life. The key idea is to continue to question the authority of the author and their 'method' at the same time as we question the engagement of a methodology in re-enacting aspects of the 'world.'

So, while Meloy (1993) stated almost 20 years ago that, beyond 'how to' books, there are few guidelines for creative writing and representation, there are now many examples, with options available or that can be transcended as representational forms, readily found amongst a proliferating field of periodicals and serious philosophical groundwork. It is also fair to observe that, as arguments for diverse forms of educational research have become clearer and more lucid, so the theoretical and methodological groundings have evolved in their depth and complexity, particularly with regard to their portrayal of issues of representation and reflexivity.

The level of sophistication in articulating these groundings is illustrated in Probyn's (1993) argument that the problem of reflexivity is in fact the conception of the self – the onto-epistemic positioning that warrants attention in representing both self and other. As Skeggs (2002) puts it, there is a difference between being reflexive and accruing reflexivity to oneself. By paying attention to the cultural resources we use to author and authorize accounts of ourselves, being sensitive to power and process in research design and viewing one's self with a mobile or fluid sense of identity, we *may* become more intelligible and credible in our representations of self and others. As Gonick and Hladki (2005) suggest, new theorizations of the 'subject' can be made to perform as reflexive, self-interrogating spaces that problematize the naming practices and categorizations of researcher and researched subjects, forcing us to think beyond our starting (research) assumptions and discourses. In effect, current debates about representation in and of research work to address ethical and political questions in meaning-making through educational inquiry.

In this vein, questions about how participants become knowable become a key questions for of accounts of our research practices. Schwandt (1997) refers to this process of challenging assumed onto-epistemic certainties as using methodological deliberations to question the 'being for' and 'being with', within the ambiguities and uncertainties of socio-cultural intersubjectivities. It entails using methodological reflexivity to surface and challenge our own (researcher) onto-epistemic assumptions within new terms of engagement, that can better account for subjectification

processes as more complex understandings of a coming into being through 'education', playing with other systems of thought or imaginings that disrupt assumed categories of 'education'. It also means helping us to realize the limits of research, that researchers live with, and within.

Researchers of education then are being challenged to create conditions to think differently about our inquiries, to create new mindsets and paradoxical spaces that transgress normal boundaries and patterns of thought about education. If accepted, this is difficult and complex work that requires deeper readings of theoretical and practical accounts of the crisis of representation than we have inherited within many of our discursive-based systems and accounts of what counts as educational research. The charge – better, risk? – is, the system as perpetrated, feeds authors' illusions of singularity, consistency and coherence, even as it fails to acknowledge the limits of our knowing and knowledge. Becoming more conscious of these processes, it is argued, serves to push us to greater awareness of our own multiple, contradictory and shifting positions, encouraging us to become more conscious of representing complexity as problems of knowing, as we represent the researched and ourselves as researchers in order to know and represent what has been researched, why, how and with what outcome(s).

In other words, questions of reflexivity demand of the contemporary researcher a 'finding strange' of our processes of representation as we engage and interrogate them and the texts we use to construct them in accounts of educational inquiry. This entails, for example, taking into account our representations in ways that undo naïve believability in the eyes of the reader, perhaps by consciously creating deflections and disruptions of realist assurances in our original texts; if not because, at the very least, we need to acknowledge that our texts may be disrupting to readers.

In the following chapters, each of the authors has found ways to help us to understand such processes of 'becoming difficult' about and skeptical of innocent speaking about educational research. This in turn can help us to think about how and what we write in ways that not only inform and educate, but also are more capable of disrupting what is thought about education and the categories of thought that delimit the thinker and predetermine thought and empirics about education (see Macbeth 2001).

John Schostak's exploration of historical issues in representing research within education is contextualized by several basic 'what counts' questions. The chapter is structured around struggles to represent educational research from various methodological perspectives outside the dominant social paradigm. By describing how educational researchers have, out of necessity, focused on the representation of lived experiences, he also problematizes existing notions of 'effectiveness' within contemporary contexts that demand critical attention about effects on people's lives

within 'efficient' educational institutions. The idea of 'the case' is used as a device to think through the appropriateness of narrative form, using ethnographic processes as an example of ways of representing the particular in the face of the universal. Schostak's discussion is framed in terms of an ontological concern, that is, as a difference in worldviews – one in search of homogeneity, the other(s), and heterogeneity. Engaging in such debate, he says, opens up 'representational spaces' for articulating and emancipating people's voices for different kinds of engagement with different kinds of knowing and knowledge, and of society. The question for new and more seasoned educational researchers is the same – how to find one's bearings within and without existing discourses of education? The response championed involves becoming clearer and critical of researchers' own and others' ontological commitments as discursively and historically constructed in relation to existing power regimes. Then, working politically on equitable principles of methodological and epistemic procedure, assuming, of course, some semblance of participatory democracy within and as educational research.

Georgina Stewart's response tries to direct the reader's attention to the identity politics implicated in Schostak's argument for greater socio-political justice within the various settings and relations for instances and priorities in educational inquiry. Her strategy acknowledges the political context of representation of educational research whilst emphasizing the value of removing political tensions created by thinking across familiar dichotomies or binaries. The value of the philosophical side of representation work notwithstanding, Stewart suggests a strong need to engage social policy dimensions that encompass interests of wider political representation. Indeed, of Schostak's contribution she asks for 'more, please': singling out the courage necessary to identify one's own voice, on getting 'above the noise' as a task of researcher and researched identity work, and in particular, in adopting a more scholarly orientation to 'representing' or 'voicing' one's or another's stories, experiences and perspectives.

Michael Roth's focus on representation in terms of the social semiotics of inscription presents a series of reflections on his own approach to research. The chapter attempts to break the quantitative-qualitative binary in thinking about representation, by using representations of astrophysical data to speak to questions of mathematical representations of samples as 'numerical summaries'. Recognized as such, they permit a questioning of how we become conscious of choices we make in considering the rhetorical power of particular forms of inscription as representational. The key points about how we decide to aggregate, differentiate and generalize, Roth says, are based on justifying what we claim to represent in either numbers or words. The chapter continues by describing how Roth used his students'

decisions (about how to represent their ecology studies) to provide his own meta-commentary on their decisions. Thus Roth articulates his own analytical-as-interpretive thinking as a chain of increasingly complex and abstract representations, always cognizant of notions of sliding scales of quantitative-qualitative work and different levels of generalizability. Readers can see how Roth makes strategic representational choices at varying levels of complexity, speculating ‘out loud’ about the value of particular representational media such as maps, charts, or graphs, as well as via comparisons and causality chains.

In her response, Lilian Pozzer-Ardenghi extends this thinking into the world of visual representation. Arts-based and narrative forms of text are used to engage readers with different forms of evidence. She observes that power resides in the subjective nature and emotional impact of such texts, and this is manifest in ways that suggest that readers might be moved by the power of image. In ways similar to Schostak, she seems acutely aware of the importance of onto-epistemic perspectives in underpinning the purposes of our inquiries and, in turn, of how explicit and implicit purposes may drive research practice and accounts of ‘what counts’ as evidence in, and as, educational research.

Kathy Nolan’s chapter takes readers into the “heART” of boundary issues, in terms of questions of relationship between research, knowing and representation. As Roth does for quantitative form, Nolan works inside researcher decision-making, focusing on her own practice of performance-based educational research. In terms highly reminiscent of Stewart, she raises epistemological issues about what and how we come to know, including language, representation and legitimation, arguing these require a shift in thinking, and a ‘writing through’ process, as illustrated within the context of her own ‘performance-driven’ study of pre-service teachers’ images of mathematics and science. Nolan’s chapter itself, in offering a ‘kaleidoscopic text’, consciously represents teachers’ images ‘true to form’, that is, as chosen by participants as expressions that convey their own voices as ideas and thoughts in a particular aestheticized form. Readers are invited to ‘look again’ at their own thinking about their experiences in math/science (as education phenomena) in new and perhaps more authentic ways, inflected perhaps by qualities of disruption and discomfort that invite further thinking about young people’s own experiences, interpretations and memories of these subjects in school. Nolan’s preparatory epistemological groundwork in arts-based inquiry also engages the disciplines of interpretation, learning and language within constructivist spaces and discourses. Consequently, she argues, participant-researcher conversations can be represented in several formats including the poetic and dialogic as ‘accounts’ of educational research. While true to her commitment to representing the natural complexity of these phenomena, Nolan eschews the idea of ‘concluding’

her piece, in favour of raising further questions about the discourse of education, traditional forms of research and representation, as well as her own struggles in going against the grain.

In an accompanying vignette, Wanda Hurren extends the argument of Nolan’s disruptive text in a delicate deconstruction of ‘what counts as truth’ in educational research. We soon sense an iron fist lurks within a silken glove. As a creative extension of “mapwork,” Hurren metaphorically interrupts modernist assumptions about our taken-for-granted notions of just about everything we thought we knew about educational research and its representation. The relation she sets up between worldview and identity is particularly compelling in its linking of place and texts of place, where mappings, in the form of peopled narratives, can take a variety of representational forms. This is complex conceptual work even as Hurren grounds this in practical pedagogy. Her vignette both complements and compliments Nolan’s chapter, as a performance text consciously sensitive to choices of representational form. Together their contributions question how consciously representational text can work epistemologically to challenge traditional assumptions about knowing and privileged ways of representing that, in educational inquiry. It would seem that these authors share with some others in this Part an onto-epistemic perspective suggestive of an acute concern about relations between discursive structure and subjectivity, as the atlas to the person, and as multiple representational possibilities and processes of meaning making.

The creative energy of representational disruption found in the work of Nolan and Hurren is not lost in the joint contribution from Carl Leggo and Pauline Sameshima. Their chapter shows the value of identity work in thinking about representational form. The virtues of narrative identity work become clear: not simply a tribute to fiction writing, it can be generative of representational possibilities – and dilemmas – for meaning-making grounded in transformations of accounts of lived experience. Well aware of the political minefields associated with the ‘hegemony’ of certain discourses about educational research, they are intent upon creating spaces as openings for fictional, narrative, autobiographical and artful possibilities as equally legitimate ways of knowing. In the manner of political activists, they characterize their search for better understanding of our use of ‘word in the world’ as an openly transformational project. The authors’ argument, that concepts such as truth and meaning are more relational than a matter of empirics, is of course, onto-epistemic. Yielding to the heft of their argument means recognizing that researchers cannot abjure clarity and transparency in their accounts: of their onto-epistemic positioning, of their sensitivity to conceptual and methodological processes, or of their consciousness of the politics of representational form.

Leggo and Sameshima's emphasis on narrative and story-form prior to engaging challenges in representing the work as fiction, also leads the reader (back) toward questions of value and what counts as educational research. Their insights into inquiry processes bring into sharp relief the political edge to representational work, such as where a research study sits in relation to pushing boundaries, troubling assumptions or unsettling the forms of power at play in 'traditional representations', particularly by researchers of lived experience. Ultimately it is the community of scholars who decide 'what counts' within any field of inquiry: what counts as evidence, as research, and as knowledge or 'knowing.' John Guiney Yallop's response vignette is testimony to the value of mentors such as Leggo and Sameshima who have assumed a leadership role in developing arts-based approaches to educational inquiry. For Guiney Yallop, their work sets a precedent and helps to justify methodologies and methods that represent aspects of lived experiences that resonate more widely than what is assumed to be the primary domain of educational research audiences. Of course, researchers are obliged to anticipate and to address critiques of their work, but the bottom line in these contributions becomes whether narrative research accounts can create conditions for learning that leads to change and improvement in educational provision. Natasha Wiebe's exploration of different ways that narrative researchers represented personal narrative, in her own representation of a fictional dialogue, creatively illustrates how this change can happen.

Whether Guiney Yallop's poetic explorations of place/identity in memory and fiction, or Wiebe's restorying actually have meaning for those who find these accounts compelling enough to think and work through, remains open for debate and contestation – as with all forms of inquiry. Equally, whether we care much about how our inquiries need to approximate to, for want of better words, 'applied science', as in preparing the warrant for tenure or promotion, in the stacking and exchanges of dissertation committees, or in granting priorities and policy decisions, let alone journal publication review criteria, these too remains largely the work of the community of scholars to adjudicate, particularly their institutions, learned societies, and associations. Meanwhile, we are right to expect to bear witness to the courage of scholars such as these who continue to challenge the status quo, constructing arguments that acknowledge the strengths as well as the challenges in finding more authentic, credible ways to represent the phenomena, discourse and experience of education. Thus it is of no surprise that the remaining chapters in this Part challenge the knowledge structures that tend to characterize the taken-for-granted assumptions of society and, in particular, the academy, as it relates to educational research.

Lisa Korteweg's chapter addresses issues of representation in online communication and digital media, particularly in how expanding social networking forms of representational practice are changing the dynamics and standards of educational research and scholarship. As a study critical of issues of representation that engage public dimensions of educational inquiry between Web 1.0 and Web 2.0 platforms for social tools and information space, her contribution breaks fertile ground. As Korteweg says, following Bruns (2008), when users can become 'producers' and teachers can become researchers, we begin to see how participatory inquiry approaches such as action research can also become useful, inclusive, and transformational. In fact, if she is right and obvious problems of public space can be negotiated, including her own critical questions framed as these are within Lather's (2007, 2008) epistemological challenges, there is no real reason not to move into other ways of knowing as well as possibilities of 'not knowing.' Arguably our academic institutions and publication avenues remain on the brink of challenging existing conventions of 'research account' and 'representation'. For Korteweg, whether or not this movement signals another dimension to the crisis of representation becomes fundamental to constructions and reconstructions of academic identities. While we also note that Korteweg's invocation of the notion of academic as public intellectual raises serious ethical questions of democratic participation, foreshadowing political issues of representation within public education at all levels.

Barrett's vignette illustrates the immediacy of a problem for graduate students and new scholars who recognize the value of taking possibilities of representational form seriously. Barrett goes straight to onto-epistemic questions of what can count 'within an academy' she charges to be encumbered by inertia and tradition. With the view that the game of challenging and changing foundational forms is overtaking attempts to resist or even respond, her story is, in fact, a tale of those who say it can't be done needing to get out of the way of those already doing it. That her struggle to construct a base for inquiry was credible across a range of disciplines illustrates the care needed when engaging the academy with questions of representation and quality. Barrett describes how she came to construct her dissertation as poetic hypertext, precisely because, as she argues, this representational form best captured multiple dimensions of her attempt to get to the core values of relational knowing beyond the personal-social. Mindful too of her determination in engaging the academy on the grounds for resisting and embracing this form, her vignette personifies her engagement with representation issues which, quite vividly, take her beyond and beneath the status quo of the academy. Barrett's work then addresses a broadening political context for the kind of sustained critical dialogue required in representation of many emerging forms of education research.

The optimistic tone of John Willinsky's chapter seems to summarize the sentiments of several authors in this Part of the Companion, interested in looking forward to new developments in representing research despite increased responsibility for 'the reach and value of their work.' Beyond notions of representation that document what researchers think about after the act of research, he directs attention to the publishing process itself, as a creative act of reflexive construction possible throughout the phases of the inquiry process. His reference to the AERA process of representing what the educational community views as publication standards, using words such as transparency, the logic of inquiry, making outcomes explicit, and contribution to knowledge, offers somewhat counter-intuitive evidence that narrow representational forms for improving 'scientific quality', and dare we say, 'research impact', may actually divert attention from issue of public forms of both. In essence, problems behind the so-called 'crisis' in representation are determined to be largely philosophical, even as they are positioned as traditionally outside the historical mandate of active and contemporary educational researchers. However, it seems as though the time has come to trouble claims about ideas of accuracy and fairness in representing 'reality' from a positivistic and post-positivistic base, i.e. with recourse to different onto-epistemic frames. Consequently, the vocabulary and grammar of (some of) our methodologies is shifting, from 'correspondence theory,' 'internal consistency,' 'reducing distortion' and 'what works', to how to achieve understanding and meaning (as more pragmatic and postmodernized concerns) in experiences of significance for teachers and for learners across the lifespan. The case for changing the public status of educational research accounts, Willinsky says, is in a pluralist educational research community's hands, demonstrating its public utility, responsibility and accessibility. Something would be terribly amiss if representations of educational research remained isolated (behind a 'paywall') in their own small corner of the academy while school systems flounder, sentiments Willinsky seems to share with Mia Quint-Rapoport and with Tirupalavanam Ganesh. On this common ground, the idea of attending to one's 'knowledge culture' is visible in Willinsky's concerns about how to resolve existing 'tribalisations' and tensions within the educational research community, particularly as attempts to understand and accommodate multiple perspectives on modes and issues of representation become more complex.

As portrayed in these chapters, representation issues require serious attention across many dimensions of what now counts as inquiry in educational research. Similar to earlier concerns about validity and reliability of research instruments, researchers must now address methodological issues that intermediate between theoretical perspective and method. They must now account for how their personal, social and written accounts are working as representational

(of what, of whom, and why), that is, how they can assume authority for finding particular 'findings' meaningful. As Willinsky suggests, an opening here requires detecting where the focus of the account lies: is it on writing that reflects the author's position as either disembodied as in traditional analytic research, or is it perhaps, directly implicated, as in auto-ethnographic, narrativized text? Realist inquiry impels realist writing while narrative accounts relativize the researchers' practice, necessitating critical reflexive activities. In all cases we need to interrogate the status and process of representation itself, as diverse research about education is engaged, meta-evaluated and meta-analyzed. The contention in this Part is that we must learn how to generate accounts of our work that interrupt readers with questions skeptical of innocent speaking, thus avoiding any default to naïvety about researchers' and the researched's positionality. We require texts that, aware of onto-epistemic frames, at once promise to expose and disrupt categories that predetermine thought about and representation of education.

To conclude this introduction, it remains that issues of representation have always been implicated in the educational researcher's claims to be able to represent others, their voices and points of view, be that through citation, illustration or other forms of knowledge mediation. Educational researchers are becoming increasingly challenged by requests from the wider academy to be more sophisticated in their use of critically reflexive processes of interrogating representations, conscious too of the perils of researcher privilege and the challenges of raising methodological issues for open discussion and debate. Perhaps this will no longer appear only 'natural' and 'obvious' to forms of inquiry and subjective work that eschew attempts at neutrality of position. Put otherwise, representations within this frame will require wider engagement of deconstructive processes that locate participants and authors, as Hurren, Leggo and Sameshima and others in these chapters and vignettes say, in *word* and *world*. If so, as constitutive of everyone involved in participation in inquiry processes, critical reflection on the representational processes of research becomes a professional obligation. Moreover, it may even behoove us to ensure that it is no longer simply a professional requirement and privilege to discuss methodological issues and practical responsibility towards everyone involved.

That the idea of problematizing representation of meaning, values, and knowledge in education research has often emerged from 'post-informed' critique of the entire idea of representations of knowledge and knowing must be acknowledged, of course. Yet whilst uncertainties remain about all forms of representation, some critics appear to want special relief from having to attend to those questions and issues of gender, culture, rationality and ideology that continue to plague interpretive research accounts. Yet even modest acknowledgement of the possibility of privileged or

invisible exploitative relationships – as in deconstructive autobiographical accounts of power-oppression, insider-outsider relations, and hegemony-resistance issues – continue to invite this as legitimate foci for educational research. These expose orders of interpretation and analyses that, as Macbeth (2001) says, reduce the emancipatory potential of participants in education from unrecognized commitments and adhesions of non-reflexive agency. In so doing, they can be regarded as signs of critical methodological awareness. Rather than leveling the world with singular objectivizing narrative voices (i.e., of Word and words), we reveal as much as we can of how we attempt to preserve diverse or multiple perspectives and interpretations, as ‘guarantees’ perhaps, of the value (i.e., quality) of an inquiry, despite their necessary uncertainties.

Representing interpretative research well by offering and examining more than one line of interpretation, for example, has become the proverbial ‘no brainer’ in qualitative research about education. More seriously, as this Part of the *Companion* shows, how we both do and represent other forms of research is fundamental to demonstrating researcher reflexivity within and beyond the research community. Ultimately this requires working through what we think can be known – and how we think we can render what we think we know: to ourselves and to others. With discourses and diatribes on the relative merits and failings of educational provision and aspirations being so commonplace to everyday life, researchers face already contested, multi-layered topics, and thus this warrants more intense reflection than we often vouch them. Accordingly, research accounts generated outside the safety belt of concerns with statistical validity and reliability, need to be preoccupied with teasing out philosophical and ethical groundings for intelligibility, and that requires plain hard work. If we don’t read theoretical and philosophical literature, says St. Pierre (2011), we have not much to help us think through the ‘normal and normalizing’ discourses that enculturate us, whether we are conscious of them or not. Paraphrasing, she says, I may not care what research perspective students of research take, but I do expect them to read wide and hard, to have studied bodies of theory, and become critically aware of why it is that researchers consider it their duty to research, contest and transform. And it is in so doing that we rethink ourselves as researchers of education phenomena and our representations. Thus according to St. Pierre, we must struggle as researchers with our notions of who we are in how we represent our inquiries – and how we represent our theoretical assumptions and findings in the research account. While it is in responding to such calls that we find the researchers who contribute to this Part illustrating that alongside the many possible ways to engage our thinking and subjectivities in ways that help us represent ourselves and others, we do our research with due care to ourselves, our topics and our ‘others’.

Note on Contributor

Paul Hart is Professor of Science and Environmental Education at the University of Regina and has been Visiting Professor at universities in Zurich, Bath, Durham and Monash. He has published widely in the field of environmental education, is Senior Editor of the *Journal of Environmental Education*, and Consulting Editor for several other journals. He has received many research awards and has served on the Grants Adjudication Committee for the Social Sciences and Humanities Research Council of Canada. Paul’s current research interests are in the area of sociocultural learning and the construction of environmental identity.

References

- Atkins L (2002) Reflexivity and the politics of qualitative research. In: May T (ed) *Qualitative research in action*. Sage, London, pp 332–348
- Benson K, Nagar R (2006) Collaboration as resistance? Reconsidering the processes, products, and possibilities of feminist oral history and ethnography. *Gender Place Cult* 13(5):581–92
- Bruns A (2008) *Blogs, Wikipedia, Second Life and beyond: from production to produsage*. Peter Lang, New York
- Coffey A (2002) Ethnography and self: reflections and representations. In: May T (ed) *Qualitative research in action*. Sage, London, pp 313–331
- Gonick M, Hladki J (2005) Who are the participants? Rethinking representational practices and writing with heterotopic possibility in qualitative inquiry. *Int J Qual Stud Educ* 18(3):285–304
- Lather P (2007) *Getting lost: feminist efforts toward a double(d) science*. SUNY Press, New York
- Lather P (2008) Keynote address: research as Praxis 2.0. In: *Provoking Research, proVoking Community (PRVC) conference*, University of Windsor, Windsor, , 3–5 July
- Lofland J (1971) *Analyzing social settings: a guide to qualitative observation and analysis*. Wadsworth, Belmont
- Macbeth D (2001) On “reflexivity” in qualitative research: two readings, and a third. *Qualitative Inquiry* 7(1):35–68
- McWilliam E (1997) Performing between the posts: authority, posture and contemporary feminist scholarship. In: Tierney W, Lincoln Y (eds) *Representation and the text: re-framing the narrative voice*. State University of New York Press, Albany, pp 219–232
- Meloy J (1993) *Writing the qualitative dissertation*. Erlbaum, Hillsdale
- Mountz A, Miyares I, Wright R, Bailey A (2003) Methodologically becoming: power, knowledge and team research. *Gender Place Cult* 10(1):29–46
- Myers G (2010) Representing the other: negotiating the personal and political. In: DeLyser D, Herbert S, Aitken S, Crang M, McDowell L (eds) *The SAGE handbook of qualitative geography*. Sage, Los Angeles, pp 373–387
- Pain R, Francis P (2003) Reflections on participatory research. *Area* 35(1):46–54
- Polkinghorne D (1997) Reporting qualitative research as practice. In: Tierney W, Lincoln Y (eds) *Representation and the text: re-framing the narrative voice*. State University of New York Press, Albany, pp 3–21
- Probyn E (1993) *Sexing the self: gendered positions in cultural studies*. Routledge, London/New York
- Said E (1989) Representing the colonized: anthropology’s interlocutors. *Crit Inquiry* 15(2):205–25

- Schwandt T (1997) Textual gymnastics, ethics, and angst. In: Tierney W, Lincoln W (eds) *Representation and the text: re-framing the narrative voice*. State University of New York, Albany, pp 301–311
- Skeggs B (2002) Techniques for telling the reflexive self. In: May T (ed) *Qualitative research in action*. Sage, London, pp 349–374
- Smith LT (2000) Kaupapa Māori research. In: Battiste M (ed) *Reclaiming indigenous voice and vision*. University of British Columbia Press, Vancouver, pp 225–247
- Söderström O (2005) Representation. In: Atkinson D, Jackson P, Sibley D, Washbourne N (eds) *Cultural geography: a critical dictionary of key concepts*. Tauris, London, pp 11–15
- St. Pierre E (2011) Post qualitative research: the critique and the coming after. In: Denzin N, Lincoln Y (eds) *The SAGE handbook of qualitative research*. Sage, Los Angeles, pp 611–625
- Walkerdine V, Lucey H, Melody J (2002) Subjectivity and qualitative method. In: May T (ed) *Qualitative research in action*. Sage, London, pp 179–196

John Schostak

Abstract

This chapter sketches the scene for contemporary discussions about the nature of representation in the context of what counts as research and as education. In particular, it focuses on the struggle for voice, the representation of voice, and the creation of public educational spaces where voices may be heard and views represented. It asks, who has the ‘right’ – politically, ethically – to represent themselves, others, events, circumstances, and ‘realities’ in education research? More specifically, in what ways may representations be expressed and to what extent should representations be negotiated in contexts where power is distributed unequally and where people complain of injustice? It is here that the political and ethical senses of representation come to the fore and educational research must confront what counts as a view or a voice that can be recognised, as well as how to render ‘data’ and ‘evidence’ visible in ways that can be called ‘valid’ and ‘generalisable’. Rather than reducing the experiences of people to measurable facts alone, the complexities, richness and messiness of everyday life requires methods capable of exploring the discourses, feelings, observed practices and meanings given to those practices. Thus the chapter traces the development of methodologies and critical perspectives developed to meet the challenges posed by the complexities of social life and educational experiences in the construction of democratic public space.

Keywords

Representation • Historical trends • Power • Emancipation • Voice

Introduction

Does educational research represent objective facts and universal theories that must be taken into account in policy and professional decision making; or can research only represent incomplete, tentative bodies of evidence always open to revision and thus are only the best possible at any given time? Or even, can research only represent particular views that involve particular interests? In this latter case, research is subjected to the relative powers of individuals,

groups, institutions and states – it becomes an ingredient in political contestation and ‘lawful’ enforcement. In each case, research as somehow representing an independent source of knowledge that ‘objectively’ grounds evidence and thus judgement, decision making and action is an ideal that is either claimed or, at least, haunts academic and scientific discourses.

Research, like all human social activities, has its historical grounds, that is, histories born of a struggle not just to know and understand, but for the *freedom* to know and inform both personal and collective judgement and action. Thus education that desires an end to any subjugation to authoritarian or traditional bodies of knowledge, beliefs and values, need ways of liberating thought through a grounding that comes only from the free exercise of research. In this process there

J. Schostak (✉)
Education and Social Research Institute, Manchester Metropolitan
University, Manchester, UK
e-mail: j.schostak@mmu.ac.uk

are, broadly, two opposing approaches. The first stems from the desire to employ universal criteria or norms against which findings, evidence, theories, hypotheses or propositions can be judged, validated or tested. The desire here is for proof, for certainty. The second explores the practices involved in producing knowledge, belief, certainty. Its critique of accepted views of ‘reality’ resides in showing that they are historically constructed rather than drawn from universals or ‘brute facts’ that are given through processes of empirical observation.

Both involve, in Quine’s (1948) terms, ontological commitments concerning how the world ‘is’. The first involves a commitment to a correspondence between what can be observed as ‘real’ and its representation, as well as a commitment to a unified reality that can be described in terms of universal laws and theories. The second involves a commitment to the real being irreducibly plural, multiple or heterogeneous. That is, in this second view, there is no unifying principle or law covering all things with certainty – any apparent universal can always be broken down or deconstructed to show that it has been historically produced by bringing together, or knotting, disparate elements into an apparent unity or synthesis. The knot can always be undone.

The contemporary debates in educational research are a consequence of this struggle.¹ In each case, the central issue at stake is the question of what can be known through human reason in order to inform action and develop one’s self. The stakes were summed up in Kant’s answer to the question what is enlightenment?

Enlightenment is man’s [sic] emergence from his self-imposed immaturity. Immaturity is the inability to use one’s understanding without guidance from another. This immaturity is self-imposed when its cause lies not in lack of understanding, but in lack of resolve and courage to use it without guidance from another. *Sapere Aude!* “Have courage to use your own understanding!” – that is the motto of enlightenment.

(Kant 1784, ¶1)

And in particular, Kant writes: “Nothing is required for this enlightenment, however, except freedom; and the freedom in question is the least harmful of all, namely, the freedom to use reason publicly in all matters.” This is an unquestionably educational proposition. Its underlying stakes are absolutely about the free use of reason publicly – in all matters. The free and public use of reason implies a

public domain for individuals, the development of the powers of reason, and the conditions under which people are able to express freely and act freely on the basis of their rationally conceived conclusions. The gold standard of public life for the Enlightenment philosophers, then, was reason. But there was nothing neutral about this ‘reason’. It was to do battle.

The Politics of Representing Research

Representing research in education is a fundamentally political act. It has to be, given that all members of any particular society are prepared for that society through the various formal and informal institutions where individuals are engaged in learning knowledge, skills, values, beliefs, forms of conduct. As implicit in Kant’s formulation of what is at stake in ‘enlightenment’, the political significance of education in combination with research is the question of freedom from previous forms of education in order to ‘use one’s understanding without guidance from another’ and ‘use reason publicly in all matters’. However, as Nordmann (2007) points out, there is an essential ambiguity in schools. On the one hand they are hierarchical and involved in socialization and the reproduction of social forms; and on the other, they are involved in enhancing the powers of individuals to think for themselves, that is, emancipate themselves from subjection to authority and the powerful. Politically, this distinction has been made by Lefort between *la politique* and *le politique* (cf., Lefort 1988). The first refers to the policies, the laws, the forms of administration through which a particular political system has been *instituted*. The latter refers to the initiating powers of people themselves in *instituting*, or bringing about, a particular community, nation or State and the emergence of a particular political organisation. What ‘side’ of this ambiguity does research ‘represent’? Much research stemming from Marxist, feminist, anti-racist, symbolic interactionist and phenomenological traditions has been employed to describe, understand and critique the socialization and social control functions of schooling; other forms of research, such as action research and emancipatory research have typically been employed to enhance the creative powers of young people and teachers. However research has also been employed to reinforce socialization and control by engineering behaviour as in behaviourism (cf. Skinner 1953, 1976). Thus in political terms, research representations of social realities can be used to enhance the powers of individuals to initiate creative forms of social organization; or they can be used to reform or reinforce the already instituted powers of social order through the application of government defined policy.

Educational research as a representative of instituted forms of government can be seen in research focused on ‘school effectiveness’, ‘school improvement’ and in demands for

¹ The struggle has had many manifestations whether between quantitative or qualitative approaches, or between structural and post-structural or between modern and post-modern. One of its most recent manifestations was in the Sokal hoax. Sokal (1996a) a physicist wrote a mock article in a postmodern style to see if he could get it published. It was. It generated considerable debate about the ‘meaning’ of deconstruction, Lacanian analysis and so on (see also 1996b, and Sokal and Bricmont 1998). A good counter discussion can be seen in Davis (2004), Schostak (2006), and Schostak and Schostak (2008).

research to provide an ‘evidence base’ of systematically evaluated knowledge as to ‘what works’ (Hargreaves 1996). Reynolds for example, explicitly refers to what he calls high reliability organisations, such as nuclear power stations and air traffic control that necessarily require highly reliable systems. Thus, he talks of high reliability schools (Reynolds and Stringfield 1996; Clarke et al. 2004).² The key focus for school effectiveness researchers has been upon the classroom as the unit for bringing about improvement (Thomson 2007) in terms of reaching key attainment targets, typically related to government policy. Research into ‘what works’ to bring about improvement is thus politically significant.

The significance is seen, for example, in Pollard’s (2007) description of the work of The Teaching and Learning Research Programme (TLRP). Its total budget ‘in the summer of 2007 was some £43 million and drew contributions from a wide range of UK government bodies.’ The programme is a response to critics – such as Hargreaves (1996), Reynolds et al. (1996), and Tooley (1998) – who considered that educational research in the UK was ‘small scale, irrelevant, inaccessible and of low quality’ (Pollard 2007; see also Hammersley 2007, for coverage of the debate). An underlying concern was for educational researchers to have influence with policy makers. For Edwards et al. (2007, p. 649) a possible interpretation of ‘how educational research was being positioned was to see it as caught up in a battle over whose knowledge was power in what had increasingly come to be labelled as the knowledge economy.’ However, the context for such influence is severely framed within a neoconservative and neoliberal discourse (Norton 2004; Apple 2004; Harvey 2005; Caughlan and Beach 2007). This discourse favours a business model, focusing upon easily measurable inputs and outputs that can be audited, and quantifiable standards by which comparisons can be made. In this climate, research is visible and audible in the public domain only if it provides evidence in a way useful to policy makers.

Criticisms come from what Kuhn (1970) describes as alternative paradigms for doing science. Phenomenologists following Husserl (1970) have criticised the mathematisation or geometrisation of the world from the early radical approaches of Bacon and Descartes and the Enlightenment philosophers through the industrialisation and bureaucratisation of the industrial revolution and ‘Modernity’ to the communications and information revolution of ‘postmodernity’. In each case, particular ‘ontological commitments’ – that is, views expressing commitments about ‘what there is’, or the nature of the world – are made concerning the relationship between how the world is described and the objects, processes or things that compose

the world (Quine 1948). At its extreme the psychologist Thorndike considered that if it exists it can be measured.³ Methodologically, then, that which could not be measured – such as inner states of feeling – became invisible for positivists – that is, for those who seek ‘objective facts’ unencumbered by ‘subjective values’. Such views when linked to particular political or other interests acts to stem methodological criticism. Quantitative research designs, nevertheless, provide a powerful framework for critical analysis and understanding of social and educational phenomena. The argument is rather to highlight the strategic political significance of two approaches to representation: (1) research as having a unique set of practices capable of representing ‘reality’ unpolluted by subjectivity; (2) research as representing the interests of those in power by engaging in research that they deem ‘useful’. Thus, for example, in 1999, Willmott responded to the adherents of the school effectiveness and school improvement movement arguing that “exponents of school effectiveness research are unable to see the full force of the criticisms levelled against them since the causal mechanisms postulated by critics (which are held to be relatively independent of the events they generate) are deemed to have no real existence and thus are held not to be permissible contenders in their explanatory framework” (1999, p. 255). That is to say, their commitment to the statistically-based, broadly positivist framework for defining what counts as ‘science’ and thus as acceptable research means they are unable to see as relevant the evidence that is drawn from alternative paradigms. There is a real struggle here that should not be underestimated: the struggle to represent research in the public domain in general and the domains of education in particular. At the level of the school, as Waller (1932, p. 196) expressed it, “The teacher represents the established social order in the school, and his [sic] interest is in maintaining that order, whereas pupils have only a negative interest in that feudal superstructure.” Rather than an organisation constructed for the expression of freedoms in community, he said, there are ‘hostile parties’. Counter to such models of schools, however, there are other rationalities that have underpinned educational initiatives. Godwin (1793) proposed an ‘anarchist’ (meaning, without a leader) approach to education that was founded on the ‘natural’ desires of children to learn. Dewey (1938) adopted a democratic child-centred ‘discovery learning’ approach. Isaacs founded her school employing child-centred, discovery learning, on psychoanalytic principles. Neill (1973) founded Summerhill as a democracy of children. In the 1960s and 1970s there was the development of the ‘free school’ movement and radical approaches to education in ordinary schools (for example,

² See: <http://www.highreliabilityschools.co.uk>

³ ‘Whatever exists at all exists in some amount.’ Thorndike (1918).

Holt 1969; Kohl 1971; Postman and Weingartner 1971; Sharpe and Green 1975; Dale 1979) and the *Plowden Report* (1967) was influential not only in the UK in promoting child centred or ‘progressive’ education. In Rancière’s (1995, 2003, 2004) terms, whatever research methodology is chosen – quantitative or qualitative or mixed methods – it is a political struggle to make visible and audible and thus represent those elements of the social that are defined as being invisible or mere noise by those in power.

Research as Representing the Realities of Education

By focusing closely on the experienced realities of people, their hopes, their frustrations, their desires, their needs, their conflicts and their achievements, research can represent the multiple views of those involved in education – whether they are children or adults, teachers or learners, policy makers or parents, employers or employees. Rather than measurement to produce ‘social facts’ like the ‘facts’ of nature, the validity of research proceeds through observation informed by the meanings that people in their everyday lives give to their experiences of the world. The close observation of everyday life was a key feature of Waller’s approach where the task was “to present materials in such a way that characters do not lose the quality of persons, nor situations their intrinsic human reality” (Waller 1932, pp. v–vi). This focus on the concrete can be seen in the further development of symbolic interactionism (Mead 1934; Blumer 1969) and the phenomenology of Schutz (1976) that seeded the various developments and flavours of ‘qualitative’ research methodologies. The social construction of the ‘hostile parties’ described by Waller was explored in many studies whether described as the construction of subjugation and boredom (for example, Jackson 1968) or as the labelling of working class children in terms of ability or behaviour (Hargreaves 1967; Lacey 1971; Keddie 1971; Sharpe and Green 1975; Hargreaves et al. 1975). Hall and Jefferson (1975) researched the ways in which young people ‘resisted’ the demands of authorities through ‘rituals’, Willis (1977) provided accounts of young working class lads ‘having a laugh’ as a means of resistance to middle class values and demands. Woods (1979) showed young people in classrooms were not merely passive but negotiated the demands of schoolwork. Feminist and anti-racist research (cf. hooks 1992, 1994; Gillborn 2006; and Singh, in Schostak and Schostak 2010) deepened the critique by focusing upon the everyday processes through which gendered and racial identities are socially constructed. As a quasi-public space in which young people and adults interact, the classroom was researched as a space of subjugation, contestation, forces of resistance and of negotiation. It could also be a space of reform, the resurgence of voices and thus of

change facilitated by critical pedagogy as a practice of freedom (for example, Freire 1972; Shor 1980; Giroux 1988, 1989).

Rather than researching the effectiveness of particular strategies to bring about desired outcomes across a large population such as reaching particular ‘standards’ in mathematics or ‘good behaviour’, or high levels of attendance in class or achieving better than other countries across a range of tests in different subjects, effectiveness itself is problematised by research into the concrete complex realities of people as individuals, as groups, as communities. Rather than a tower of accumulated ‘knowledge’ concerning ‘what works’, the very foundation stone of the edifice is whipped away; one, by doubting the desirability of effectiveness defined by the purposes of policy makers; two, by revealing the further ramifications of what ethically, politically, socially and economically is at stake for individuals whose powers are being engineered; and thirdly, by undermining the ontological commitments to a reality that can be treated as if actors, like the raw material of factories, could be purified and placed passively into categories that can then be fed into statistical machines for the production of ‘findings’ or ‘evidence’ (cf., Schostak 2002, 2006; Schostak and Schostak 2008, 2010). How, then, may research, whether quantitative or qualitative be employed to represent and thus enhance the powers of people educationally, socially, culturally, politically to improve their lives together?

Representing Complexity, Richness, Messiness

By focusing on the case, by participating in the lives of people, a richness, that is a detail that unpicks crude categorisations, can be represented by research in order to bring into public debate the alternative views to be taken into account in decision making and action. The single case is often thought of in the context of statistical reasoning as being incapable of generalisation. Hence, there is a preference for large numbers of ‘single instances’ that are representative of a ‘population’. It seems like an impasse: either there is the detailed complexity of the ‘case’ and no generalisation; or, the broad generalisation from samples but no richness. Rather than ‘either-or’, the decision as to the methods to be employed needs to be made according to the appropriateness of the research methods for a given study. Moreover, a case is not a ‘bounded system’ wrapped in its shell like an egg. Rather, like the chicken and the egg, neither comes first. Instead of a case, Ragin (1992) writes of ‘casing’. A case study is the product of a series of research acts. The case emerges from the process of engagement with people in their public and private spaces. As the research process has a history so too do the engagements of people with each other and the world about in its material and symbolic forms. The case study evolves – it has a

narrative structure (Schostak 1985) – in relation to the extent to which the research is able to engage with the actors. The process of researching and representing this engagement can be called an ethnography, that is, a writing about people in their everyday lives to the extent that they see themselves as a ‘people’, or a particular kind of people composed of people who are in some way like them and thus different from others. In educational contexts, research thus represents the experiences, desires, demands, hopes, frustrations of people as individuals who engage with others in the pursuit of their everyday lives. In this way, the ethnographic case becomes the condition for a public critique of the structures and processes of education, its aims and objectives, its allocation of resources to meet educative needs and interests. Rather than a ‘population’, there is the conflict between the individual as particular and the universalising strategies implicit in such concepts as population, people, community, institution, organisation, culture. It is the conflict between particular and universal that creates the conditions for *the* political in the sense described above. Rather than seeing individuals as if they were homogeneous members of a social body that can be classified for statistically based research procedures, their radical differences are described and inscribed in political processes that in Rancière’s (1995, 2003, 2004, 2010) terms renders visible the people who have been marginalised or unseen and makes audible their complains and their demands for justice. Rather than being the under labourers of particular governments and market interests, researchers open up the representational space, the public forum for the articulation of peoples’ voices who engage through their disagreements with one another in strategies for living creatively, democratically (Laclau 2005; Mouffe 2005). This then, is an emancipatory research strategy (Schostak 2006; Schostak and Schostak 2008). Rather than proclaiming universal laws, national values and national policies through which people can be governed and for which people are to be trained, skilled, educated, there is the development of what Mouffe (2005) calls a shared symbolic space in which alternative views and demands can be represented, contested, debated and actionable strategies developed that do not require violence as a means of resolution. Rather than antagonistic strategies there are agonistic strategies. That is to say, the shared symbolic space does not imply consensus except formally as the space in which disagreements are aired and resolutions sought to that preserve difference, or as Rancière (1995) would say, are faithful to the disagreement. This is an agonistic political and ethical framework because there are always protagonists whose disagreements are produced by their different views and demands. However, the protagonists agree that it is in their interests to resolve issues peacefully through debate and collective decision making rather than violently. It is argued that the best political arrangement for this is what Laclau and Mouffe (1985)

refer to as radical democracy, a democracy that is never completable because there are always new viewpoints and demands to take into account. In such a context, people are bound by their equality of representation within the shared public, agonistically framed, symbolic domain. This then implies a pluralistic society whether at local or global levels. It further implies that individuals who are split between their particular views and those demands that are more general or indeed universal. Individuals may align themselves with more than one grouping for different purposes. As circumstances change, so allegiances may change. The below figure represents a shifting framework where individuals are ruled or rule themselves according to a range of different laws. It is here where the Enlightenment challenge for education takes on a contemporary urgency to transform hostile relationships as in Waller’s characterisation of schooling into agonistic ones. Where the laws of one group exclude the laws of another, where there is no possibility of an overlap or at least a shared symbolic space to work out political solutions then there is something like President Bush’s⁴ axis of evil and Huntington’s (1993, 1996) clash of civilisations or the Friend-enemy politics of Schmitt (1996) and Strauss (1988) whose political philosophies have been a strong influence on contemporary neo-conservatism (Norton 2004). Where there is the possibility of debate, the possibility of arguing cases then research plays a vital role in facilitating and underpinning the conditions for an inclusive public space where voices may be heard and views represented.

When people make a complaint or present a judgement about a state of affairs, there is an appeal to some law or some value that would show the justice of their case. Whether this is a law founded upon religion, laws passed by a government, laws that are held to be traditional for a given community or ‘common sense’, there is an assumption or proclamation that the law should be true for all. There is then a potential for conflict when the laws of one clashes with the laws of another unless there is some more universal or powerful, uniting ‘Law’. In contemporary terms, the globalised market is seen by many – as in the case of the neo-liberals or Giddens’ Third Way (1998) – to be performing that role along with some form of democracy. In this case, there is no longer any major battle as to the final historical form of global order, it is a matter of resolving the local conflicts – indeed, in postmodern terms, seeing difference and political commitment as simply a lifestyle option that can be packaged and sold on the market. Under such circumstances, research in education then represents the engineering of individuals and societies to reinforce the development of the liberal, democratic market place.

⁴ State of the Union Address, January 29, 2002.

Alternatively, research can represent the differences by focusing upon the claims of individuals and the claims of particular groups or communities who define themselves by a particular set of laws, in the context of the claims of particular global or universalising political-economic forms (Monarchy, Republicanism, Liberalism, Market Capitalism, Parliamentary Democracy, Radical Democracy, and so on). The educational moment that research represents is then the presentation of a multiplicity of views for public debate and scrutiny. Research has a foundational role to play in the creation of agonistic public spaces, voices can be heard and people seen as actors to be taken into account. It is here that research in education becomes educational research. By exploring the experiences of pupils and teachers in schools, the different views that are represented create the conditions for a critique of the principles under which schools are organised and 'education' undertaken.

The struggle for voice and for the representation of voices in education can be seen in those concrete studies of particular forms of schooling where claims as to equality of opportunity are tested in relation to people's voiced and observed experiences. To what extent are the voices heard? Or are they suppressed as mad, bad, or dumb? Where mass education is organised under hierarchical, autocratic, and disciplinarian forms what foundation for democratic behaviour, justice and the development of individual, independently minded powers is thereby produced? Where research focuses on solving the problems of implementing hierarchical forms of control to produce 'high reliability organisations' whether they are power stations or schools, colleges and universities, how can the claims and demands of opposing voices be acted upon? If research that is critical of the status quo adopts an *avant-garde* position, where an elite group of experts speaks for all, how can others assert their difference? In such circumstances, research seems authoritarian rather than democratically driving the conditions for rational debate down to the immediate face-to-face relations between learners and educators. Stenhouse (1975) provided an example of this latter in his Humanities Curriculum Project (HCP) where teachers acted as 'neutral chairs'. Their role was to facilitate rational debate amongst young people who could freely express their views across a range of highly sensitive issues. Those views had to be supported by evidence. The curriculum, then, emerged through debate and the critical, rational reflection on evidence. In short, the classroom functioned as a public space where all views were to be included. Here also are the ingredients of a critical pedagogy (Giroux 1988, 1989; Freire 1972; Shor 1980) that explores the ways in which people are shaped by the pedagogies inherent in all spheres of life, not just schools, whether in the workplace, the market, the government, the media, popular culture, religion, or the home. The critical processes of research thus represent a

vital force in such debates facilitating arguments through the provision of evidence. However, does such research-based debate provide the capacity for real change in the circumstances of people's lives?

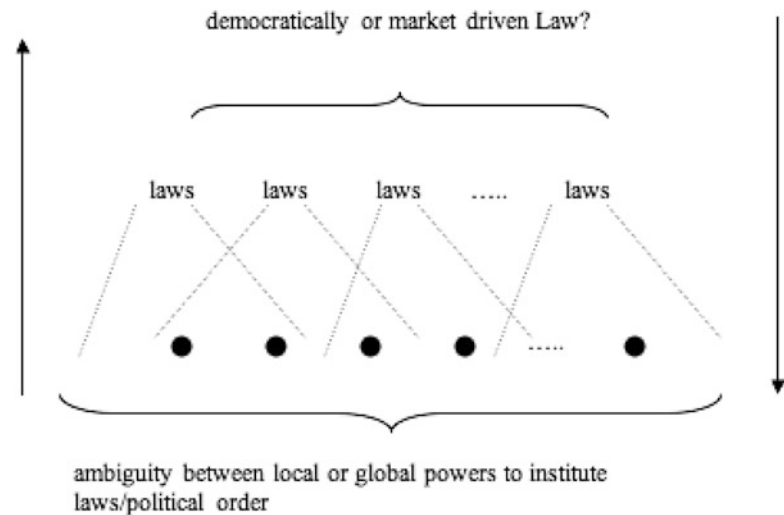
Whether Marxist, critical race theory, or feminist or other approaches are adopted in research as ways of articulating the experiences, complaints, rights, demands, needs and interests of people, the issue is not just to describe but to bring about change. Again, stemming from the work of Stenhouse's HCP, a democratic form of evaluation research methodology was developed by MacDonald (1987) that sought to realign the powers of individuals, groups, organisations and policy makers by ensuring that the range of views were represented regardless of power, privilege or numbers of people holding particular views (see also Simons 2004). A similar democratic motive was at work in the development of teachers as researchers that led to the spread of Action Research in its various forms (cf., Elliott 1991; Somekh 2006; Carr and Kemmis 1986). The teacher as professional would undertake research on their own practice within their own context in order to identify problems, issues, concerns that needed to be addressed by taking action. However, action is not easy to formulate, particularly in contexts that resist change (Schostak 1999). Research that represents the range of views and voices affected by action presents a valid mapping of the issues that need to be taken into account if change is to take place. Thus, in education, the overall issue for action research, evaluation, and research generally is the creation of public spaces where voices can be heard, demands expressed, evidence presented and debated, judgement informed, decisions made and action undertaken. The contemporary challenge for research remains to represent the freedom of all to use reason publicly and to enhance the powers of individuals to create the conditions under which action with others can be informed by reason.

Meeting the Challenge

The overarching challenge is that social life and thus education is subject to multiple views, interests and demands being made by different and often opposing perspectives and political camps. How does a new – or indeed, any researcher whatever their degree of experience – find their bearings in a complex, dynamically changing and often heated debate where people whether elites, mainstream, marginalised or excluded often have much to gain or lose?

First, the researchers may explore their own ontological, social, cultural, political commitments concerning the nature of reality and how this reality can be represented in relation to the multiplicity of views and commitments expressed by other researchers across a range of relevant disciplines as

Fig. 64.1 The development of Public Space



well as those expressed by the people who fund research and are affected by the findings of the research. Some may have a commitment to a version of empirical realism which assumes reality can be directly perceived; others may view the data derived from the senses with scepticism, believing that what appears to consciousness can provide no direct insight into the nature of things in themselves and thus what is perceived as 'reality' is socially, historically constructed. For some the world has been created, for others it has evolved through blind chance and random mutation. People may be thought to be fundamentally rational or irrational, their behaviour not so much consciously as unconsciously influenced or determined. In social terms people may think, for example, that human beings are fundamentally sinful, innocent, a cauldron of passions or a blank slate to be written upon in anyway by anyone. They may believe that it is natural for people to be competitive and that the strong will dominate the weak; that the masses must be led by elites; or that people are essentially equal, cooperative and peaceful; and so on. The possibilities, variations and combinations of such commitments and beliefs seem endless. An essential task in finding one's bearings in this profusion of possibilities is a reading of the different literatures that adopt particular positions in the debates tracing the relationship between philosophical systems, perspectives and critiques and their influence on different disciplines that study and research people, their behaviour and forms of social organisation locally and globally. On adopting one view rather than another, what is at stake, philosophically, socially, culturally, economically, politically and indeed, personally for individuals? This provides a first orientation in relation to the collection of data and its interpretation. A second orientation comes from identifying the range of different views and reasons for their views expressed by actors within a particular field or focus of study and placing them in relation to the academic debates

concerning 'reality', the 'good', the 'proper', the 'right' and so on. How, then, is this diversity to be handled?

Recalling Kant's enlightenment call for "the freedom to use reason publicly in all matters", then the diversity of interests, demands and cultural expression requires a public space for the exercise of such freedoms. Educational research thus has a role to play in both contributing to creating the conditions for the public free exercise of reason and also in representing the rationalities, the experiences, the feelings, the values, the interests, demands and the personal, community and cultural expressions of the range of voices that engage publicly with each other in day-to-day life. This engagement is fundamental to the identification of what is common, what is different and what is in opposition – it is a form of triangulation through which evidence can be constructed and contested across a range of viewpoints drawn into a shared domain for social, political, economic and cultural expression, engagement, debate, judgement, decision and action (Schostak and Schostak 2008, 2010). Research can play many different roles in this context. It can play a technical role in terms of finding solutions to problems without engaging in a fundamental critique of a given system or organisation. Or it may take an investigative, or inquiry role where the object is to discover issues, understand processes and find out the range of views that exist in a given area of interest. Or it may adopt an entirely exploratory, curiosity-driven role to add to knowledge about a particular psychological or social domain. Or it may take a more strategic role in terms of critiquing, evaluating and recommending policy alternatives. Or it may intervene, innovate and undertake actions to make changes. A programme of research may employ any combination of such roles. However, in practice, there are differences in power affecting equality of access to influence, resources and opportunities to take into account particularly in making one's voice heard whether in government, business or in the

education, health and other public institutions and systems that comprise the arenas of decision-making through which social, political, economic and cultural life is organised. Such power inequalities represent dangers as well as opportunities to effect change.

Co-option by the interests of the powerful is a danger faced by researchers as for example in policy contexts. It is for this reason that some recommend researchers to adopt democratic frameworks in the research design MacDonald (1987) as well as negotiating clear 'principles for procedure' to govern access to data sources (reports, interviewees, places for observation, and so on) and the uses of data (see for example: ELU: <http://www.enquirylearning.net/ELU/Issues/Research/Res1Ch7.html>). Without such principles agreed at the outset, researchers may find themselves barred from access or swayed by powerful groups. In practice, in such complex, difficult and sensitive contexts, the research is designed to ensure that as much as possible is placed into the public domain without harming the careers and lives of participants. The research design may be qualitative, quantitative, or some mixture of both. The critical test is that the design is appropriate for the realities under research and the audiences upon whom the research impacts and who comprise the decision-making public. As discussed in this chapter, research takes place within political contexts where what is at stake for different interest groups has a long history of struggle. Being aware of how this history influences particular contexts is critical to identifying the appropriate research design, and the appropriate methods – quantitative, qualitative or a mix – that will provide the publicly needed evidence and insights and the possibilities for action and change. Developing agreed principles amongst participants facilitates the emergence of the kind of democratic public space discussed above in relation to Fig. 64.1. The emergence of such a democratic public domain where alternative voices can be represented is critical to generating the conditions for change. It is here that the multiple ways in which evidence is constructed and what and who it represents is brought into debate and given as reasons for what counts as 'knowledge', 'truth', 'fact' or 'belief' and thus critical for forms of educational research that represent the experiences and views of people.

Note on Contributor

John Schostak is a Professor in the Education and Social Research Institute, Manchester Metropolitan University. He has been involved in over 70 funded research projects involving evaluations, ethnographies, case studies, and action research across a range of fields such as schooling, nursing, midwifery, medical education, police training and communities. He is interested in qualitative research methods generally and in particular emancipatory research as described in the book

written with Jill Schostak, *Radical Research* (2008). He also maintains the Enquiry Learning Unit website: <http://www.enquirylearning.net/ELU/SubFrame.html>

References

- Apple MA (2004) Creating difference: neoliberalism, neo-conservatism and the politics of educational reform. *Educ Policy* 18(1):12–44
- Blumer H (1969) *Symbolic interactionism*. Prentice Hall, Englewood Cliffs
- Carr W, Kemmis S (1986) *Becoming critical: education, knowledge and action research*. Falmer Press, Lewes
- Caughlan S, Beach R (2007) Fissures in standards formulation: the role of neoconservative and neoliberal discourses in justifying standards development in Wisconsin and Minnesota. *Educ Policy Anal Arch*, 15(18) <http://epaa.asu.edu/epaa/v15n18/>
- Clarke P, Harris A, Reynolds D (2004) Challenging the challenged: developing an improvement programme for schools facing extremely challenging circumstances. Paper presented at American Educational Research Association annual conference, San Diego, Apr 2004
- Dale R (1979) From endorsement to disintegration: progressive education from the golden age to the green paper. *Br J Educ Stud* 26(3):191–209
- Davis C (2004) *After poststructuralism: reading, stories and theory*. Routledge, London/New York
- Dewey J (1938) *Experience and education*. Collier, New York
- Edwards A, Sebba J, Rickinson M (2007) Working with users: some implications for educational research. *Br Educ Res J* 33(5):647–661
- Elliott J (1991) *Action research for educational change*. Open University Press, Milton Keynes
- Freire P (1972) *Cultural action for freedom*. Penguin, Harmondsworth
- Giddens A (1998) *The third way: the renewal of social democracy*. Polity Press, Cambridge
- Gillborn D (2006) Critical race theory and education: racism and anti-racism in educational theory and praxis. *Discourse: Stud Cult Polit Educ* 27(1):11–32
- Giroux HA (1988) *Teachers as intellectuals: toward a critical pedagogy of learning*. Greenwood, Westport
- Giroux HA (1989) *Schooling for democracy: critical pedagogy in the modern age*. Routledge, London
- Godwin W (1793) *An enquiry concerning the principles of political justice and its influence on general virtue and happiness*, 2 vols, 4th edn. Robinson, London
- Hall S, Jefferson T (1975) *Resistance through rituals: youth subcultures in post-war Britain*. University of Birmingham/Hutchinson University Library, London/Melbourne
- Hammersley M (ed) (2007) *Educational research and evidence-based practice*. Sage, London
- Hargreaves DH (1967) *Social relations in a secondary school*. Routledge & Kegan Paul, London
- Hargreaves DH (1996) *Teaching as a research-based profession: possibilities and prospects*. Teacher Training Agency Annual Lecture, London; reproduced in Hammersley M (ed) (2007) *Educational research and evidence-based practice*. Sage, London, pp 3–17
- Hargreaves DH, Hestor SK, Mellor FJ (1975) *Deviance in classrooms*. Routledge & Kegan Paul, London/Boston
- Harvey D (2005) *A brief history of neoliberalism*. Oxford University Press, Oxford
- Holt J (1969) *How children fail*. Penguin, Harmondsworth
- Hooks B (1992) *Black looks: race and representation*. South End Press, Boston

- hooks b (1994) *Teaching to transgress: education as the practice of freedom*. Routledge, New York
- Huntington SP (1993) The clash of civilizations? *Polit Aff* 72(3):22–49
- Huntington SP (1996) *The clash of civilizations and the remaking of world order*. Simon & Schuster, New York
- Husserl E (1970) *The crisis of European sciences and transcendental phenomenology*. Northwestern University Press, Evanston
- Jackson PW (1968) *Life in classrooms*. Holt, Rinehart & Winston, New York
- Kant I (1784) An answer to the question: what is enlightenment? Online: <http://theliterarylink.com/kant.html>
- Keddie N (1971) Classroom knowledge. In: Young MFD (ed) *Knowledge and control*. Collier-Macmillan, London, pp 133–160
- Kohl H (1971) *36 Children*. Penguin, Harmondsworth
- Kuhn T (1970) *The structure of scientific revolutions*, vols I and II, 2nd edn. Foundations of the unity of science. University of Chicago Press, Chicago
- Lacey C (1971) *Hightown grammar*. Manchester University Press, Manchester
- Laclau E (2005) *Populist reason*. Verso, London
- Laclau E, Mouffe C (1985) *Hegemony and socialist strategy: towards a radical democratic politics*. Verso, London
- Lefort C (1988) *Democracy and political theory*. Polity Press, Oxford
- MacDonald B (1972/1987) Evaluation and the control of education. In: Murphy R, Torrance H (eds) *Evaluating education: issues and methods*. Open University Press, Milton Keynes, pp 36–48
- Mead GH (1934) *Mind, self and society*. University of Chicago Press, Chicago
- Mouffe C (2005) *On the political*. Routledge, London
- Neill AS (1973) Neill, Neill “Orange Peel”: a personal view of ninety years, revised edn. Weidenfeld and Nicholson, London
- Nordmann C (2007) *La Fabrique de l’Impuissance 2. L’École, entre Domination et Émancipation*. Éditions Amsterdam, Paris
- Norton A (2004) *Leo Strauss and the Politics of American Empire*. Yale University Press, New Haven
- Pollard A (2007) Editorial: the UK’s teaching and learning research programme: findings and significance. *Br Educ Res J* 33(5):639–646
- Plowden (Ludy) and Committee (1967) *Children and their primary schools*. HMSO, London
- Postman N, Weingartner C (1971) *Teaching as a subversive activity*. Penguin, Harmondsworth
- Quine WVO (1948) On what there is. *Rev Metaphys* 2:21–28
- Ragin CC (1992) “Casing” and the process of social inquiry. In: Ragin CC, Becker HS (eds) *What is a case? Exploring the foundations of social inquiry*. Cambridge University Press, Cambridge, pp 217–226
- Rancière J (1995) *La Méésentente*. Politique et Philosophie. [Disagreement: politics and philosophy]. Galilée, Paris
- Rancière J (2003) *The philosopher and his poor* (trans: Drury J, Oster C, Parker A). Duke University Press, Durham
- Rancière J (2004) *The politics of aesthetics* (trans: Rockhill G). Continuum, New York
- Rancière J (2010) *Dissensus*. On politics and aesthetics. Edited and translated by Steven Corcoran. Continuum, London/New York
- Reynolds D, Bollen R, Creemers B, Hopkins D, Stoll L, Lagerweij N (eds) (1996) *Making good schools: linking school effectiveness and school improvement*. Routledge, London
- Reynolds D, Stringfield S (1996) Failure free schooling is ready for take off. *Times Education Supplement*, January 19, p 10
- Schostak JF (1985) Creating the narrative case record. *Curriculum Perspect* 5(1):7–13
- Schostak JF (1999) Action research and the point instant of change. *Educ Action Res* 7(3):399–417
- Schostak JF (2002) *Understanding, designing and conducting qualitative research in education: framing the project*. Open University Press, Buckingham
- Schostak JF (2006) *Interviewing and representation in qualitative research projects*. Open University Press, Maidenhead
- Schostak JF, Schostak JR (2008) *Radical research: designing, developing and writing research to make a difference*. Routledge, London
- Schostak JF, Schostak JR (eds) (2010) *Researching violence, democracy and the rights of people*. Routledge, London
- Schmitt C (1996) *The concept of the political*. The University of Chicago Press, Chicago
- Schutz A (1976) *The phenomenology of the social world* (trans: Walsh G, Lehnert F). Heinemann, London
- Sharpe R, Green A (1975) *Education and social control. A study in progressive primary education*. Routledge & Kegan Paul, London
- Shor I (1980) *Critical teaching and everyday life*. South End Press, Boston
- Simons H (2004) Utilizing evaluation evidence to enhance professional practice. *Evaluation* 10(4):410–429
- Skinner BF (1953) *Science and human behaviour*. Macmillan, New York
- Skinner BF (1976) *Walden two*. Macmillan, New York
- Sokal A (1996a) Transgressing the boundaries: towards a transformative hermeneutics of quantum gravity. *Soc Text* 46/47:217–252
- Sokal A (1996b) A physicist experiments with cultural studies. *Lingua Franca* 6(4):62–64
- Sokal A, Bricmont J (1998) *Intellectual impostures: postmodern Philosophers’ abuse of science*. Profile Books, London
- Somekh B (2006) *Action research: a methodology for change and development*. Open University Press, Buckingham
- Stenhouse L (1975) *An introduction to curriculum research and development*. Heinemann, London
- Strauss L (1988) *What is political philosophy? And other studies*. University of Chicago Press, Chicago, Originally published 1959, by Free Press, Glencoe, IL
- Thomson P (2007) *Whole school change: a review of the literature*. A report for creative partnerships, Centre for Research in Equity and Diversity in Education, School of Education, The University of Nottingham and the Arts Council England, June; www.creativepartnerships.com/literaturereviews
- Thorndike EL (1918) The nature, purposes, and general methods of measurements of educational products. In: Whipple GM (ed) *Seventeenth yearbook of the national society for the study of education*, vol 2. Public School Publishing, Bloomington, pp 16–24
- Tooley J (1998) *Educational research: a critique*. Office for Standards in Education, London
- Waller W (1932) *The sociology of teaching*. Wiley/Chapman and Hall, New York/London
- Willis P (1977) *Learning to labour*. Saxon House, Farnborough
- Willmott R (1999) School effectiveness: an ideological commitment? *J Philos Educ* 33(2):253–268
- Woods P (1979) Negotiating the demands of schoolwork. *J Curriculum Stud* 10(4):309–327

Georgina M. Stewart

Abstract

John Schostak argues that qualitative research methods give voice to the experiences and interests of under-represented groups in society, and therefore have greater emancipatory potential than quantitative methods. He highlights the political significance of the link between positivist-influenced ideas of what counts as valid educational research and the exclusion of qualitative studies from major government-funded programmes. Greater socio-political justice is a worthy aim shared by many educational researchers, and for this reason the chapter makes a valuable contribution. This response examines the links drawn by Schostak between debates at the philosophical and political levels, finds some to be overstated, and argues that social science research invariably reflects the perspectives and ethos of the researcher. In this sense, the emancipatory potential of educational research depends more on its scholarly orientation, or academic identity, than on the empirical methods it employs.

Keywords

Critical theory • Identity politics • Kaupapa Māori research • Relativism • Universalism

John Schostak's chapter on representation in educational research explores a series of binary oppositions or tensions in education, at different symbolic and socio-political levels, along with their links, overlaps and real-world consequences, for education researchers as well as for the communities and education systems where they live and work. His discussion centres on "representation" in the political sense, which is closely related to the notion of "voice" in social science research methodology. This discussion is important because "representing research in education is a fundamentally political act" (p. 6XXX). This response to Schostak's chapter starts from the understanding that effectively *every* act in education is fundamentally political.

Whose agendas are reflected in educational research? This question is sharpened by considering the fact that most educational research, and education in general, is

funded from public or taxpayer money, which is politically feasible since disputes as to the value of the individual benefits that derive from success in education are rarely heard. All citizens pay for schools, and systems such as research that support schooling, yet it has been proved beyond doubt that the socio-economic benefits of school success devolve overwhelmingly to the children of the elite families in the particular community or social context (Scantlebury et al. 2002; Thrupp 1999).

Schostak suggests that educational research either reinforces central government policy, or empowers and emancipates "individuals to initiate creative forms of social organization" (p. 490). This bifurcation of purpose, he argues, arises from an "ambiguity" between existing socio-political institutions (e.g. education systems) and those which, as he puts it, "people themselves [are] instituting, or bringing about" (*ibid*). This political tension is reflected in schools in the familiar dichotomy between their social reproduction function and the classical educational ideal of liberty through reason.

G.M. Stewart (✉)
Faculty of Education, University of Auckland, Auckland, New Zealand
e-mail: georgina.stewart@auckland.ac.nz

In the chapter's introduction, Schostak describes an underlying theoretical binary in relation to the methodologies, strategies or paradigms of educational research. This binary is manifested in the "struggle" between quantitative and qualitative research, which "seems like an impasse: either there is the detailed complexity of the 'case' and no generalisation; or, the broad generalisation from samples but no richness" (p. 492). Citing Kuhn's delineation of alternative paradigms of science, Schostak connects this debate to the larger "science wars" that have accompanied changes and resultant loss of stability in the world of Western philosophy during the last 50 years or so, not least owing to the contribution of Kuhn himself. By way of example, Schostak lists paired sites of this struggle, including "between quantitative or qualitative approaches, or between structural and post-structural or between modern and post-modern" (fn. 1, p. 490).

Here Schostak invokes the philosophical sense of representation, as in our ability to accurately represent reality. Adherence to belief in a unified, knowable reality that can be adequately represented by science, including educational research, contrasts with the view that "there is no unifying principle or law covering all things with certainty – any apparent universal can always be broken down or deconstructed to show that it has been historically produced" (p. 490). Schostak aligns the former view, which might be termed universalism, with a positivist philosophy of science and a tendency to regard research employing quantitative or statistically-based methods as more scientifically valid or truth-producing than other forms. This is a crucial observation in light of recent large, internationally influential programmes of government-funded educational research in the US¹ and UK aimed at school effectiveness and improvement, in which only quantitative studies have been included.

Schostak omits to clarify, however, that positivism is regarded by contemporary philosophy of science as outdated and ideological, as a distorted representation of the nature of science (Chalmers 1999; Putnam 2004). Further, his description of the opposing view goes to the opposite extreme – that of radical relativism – in a way that conflates the various levels at which words such as "reality" and "truth" can be understood. It is unhelpful to present the philosophical problem of representation in such extreme terms because it sets up a "straw" or false binary. Schostak does acknowledge the limitation of his binary model when he points out that quantitative methods also have emancipatory potential: "Quantitative research designs, nevertheless, provide a powerful framework for critical analysis and understanding of social and educational phenomena" (p. 491).

¹ Examples include the No Child Left Behind Act (2001) and *Foundations for Success: The Final Report of the National Mathematics Advisory Panel* (2008).

To engage in academic debate – indeed, to accept the very concept of language as a shared system of meaning – is to adhere, to at least some degree, to a belief in a knowable reality and our ability to represent it. This position moves towards a more nuanced view of relativism as a critique, or modification, rather than an outright rejection of universalism (Herrnstein Smith 2005). Rather than a binary choice between mutually exclusive opposites, both views on the philosophical problem of representation may then contribute to underpinning our understandings and investigations of complex social phenomena such as education or identity politics.

Rather than proclaiming these philosophical tensions as binaries that underlie our praxis as educational researchers and scholars, philosophical work in educational research might be better envisaged as characterising the boundaries (Rudolph 2010) of these positions I have labelled above as "universalism" and "relativism" – by which I mean exploring areas of shared agreement, and disagreement, between the groups represented in a democratic pluralist polity, in what Schostak terms the Public Space. Boundaries are not themselves either oppressive or emancipatory. In the interests of students and social justice, some boundaries must be broken down, while others need to be protected. Many such boundaries are useful in producing new forms of identity, and knowledge: this is one way to understand the phrase "knowledge economy" (Gilbert 2005). The next section fleshes out these philosophical "boundary tasks" by returning to the question of political representation in education and educational research.

A major argument in Schostak's chapter is that qualitative methodologies are able to give voice to the experiences of otherwise under-represented sociopolitical groups in a way that quantitative methodologies do not, and therefore can help empower the non-elite in society who cannot participate in democracy unless their views are heard. Describing quantitative methods as "reducing the experiences of people to measurable facts alone" (p. 489) links this argument to the larger debates in the philosophy of science described above, in which the term "reductionism" refers to this propensity in positivist philosophies of science.

Schostak's chapter therefore makes an important contribution to the education policy debate, where decisions to exclude all but quantitative studies from current and future government funding must be vigorously challenged, and their underlying socio-political elitism exposed. Indeed, he pinpoints the very reason why qualitative methodologies have emerged in education and related domains of social science. Complex objects of study such as children, learning, culture and language are woefully inadequately described by numbers.

Commentators of the stature of Schostak are thus important champions in this "battle" (p. 491) against a distorted form of positivism which, as he notes, "haunts academic and scientific discourses" (p. 489) – including, one might add, those halls of government where spending decisions about education are

made. It is important to recognise how this philosophical debate about knowledge, part of the “science wars” referred to above, influences the domain of public policy. The long-standing debate or anxiety about whether or not educational research is scientific is linked to the claim mentioned above that quantitative research is “more scientific” than qualitative research. While the philosophical discussion continues, this shady assertion acts to mask anti-democratic influences on the purse of the contemporary nation-state, enabled by those who represent the interests of societal elites. Schostak’s chapter includes educational research in a wider view of social policy in the interests of enhanced political representation for non-elite sectors of society.

And yet... the chapter is itself written in the invisible academic voice so deeply implicated in the universalist philosophy that masks the claims made by the West over the symbolic realms of reason and the academy. The chapter does not make completely clear the author’s own stance on the political issues he discusses. In this sense the identity of the scholar, and the scholarship, remains undisclosed. No doubt in the interests of balance, the chapter attempts to fairly represent both sides of the political debates in education. Yet even to give credence (voice, ink, representation) to the idea that “the globalised market . . . along with some form of democracy” can “perform the role” of a “uniting Law” that is “the final historical form of global order” (p. 493) would appear to undermine the expressed concern to “represent those elements of the social that are defined as being invisible or mere noise by those in power” (p. 492). Indigenous scholars have shown that the globalised market is the emerging contemporary form of imperialist Western capitalism (Stewart-Harawira 2005). In this way the chapter illustrates the principle that critical theory must be socially located in order to realise its emancipatory aims (Young 1989). This brings me to consider the identity politics of educational research.

The adoption of a particular identity or voice as an educational researcher and scholar is a strategy for doing better science, in recognition of the limitations of traditional research paradigms, as discussed above. In this regard it is important to remember that in educational theory, and in critical theory, the boundary is blurred between paradigm and methodology, theory and practice. This blurring is seen in the notion of “praxis” as well as in the emergence of “standpoint epistemologies” (Harding 1998). My own research identity, for example, offers allegiance to the tradition of Kaupapa Māori research, a local Aotearoa New Zealand form of critical methodology that has emerged in recent decades amongst Māori academics, in response to the “dominant detrimental stories” about Māori that have been told by Western educational research (Smith 1999).

Kaupapa Māori research aligns with other critical research traditions such as indigenous, feminist and postcolonial social

science. These traditions share a historical origin that includes a critical examination of how the notion of the “other” in research reproduces the existing disparities in societal power of the historically researched group, as a basis for emergence. In other words, an emancipatory stance is built into each of these traditions by virtue of its reason for being (Ladson-Billings 2000). In this way, critical educational research methodologies are defined by identifying their political stance or “scholarly orientation” (Locke 2004, p. 2) rather than their empirical methods. A Kaupapa Māori research perspective asks whose knowledge, language and culture are represented in education as part of the methodology, while employing all applicable research methods to carry out the resulting investigations of interest. These research questions represent examples of what in Schostak’s chapter remain unspecified as “multiple views” and “disagreements”.

Educational researchers who work to increase social justice must engage with the “messiness” (p. 492) of voicing their own ethical location in relation to the ethical questions represented in their work, and in so doing become “situated researchers” (Hermes 1998) or, in Foucault’s terms, “specific intellectuals” (Rabinow and Rose 2003). The emancipatory potential of educational research rests primarily on its identity, understood as the perspectives it represents, rather than on its empirical methods.

Note on Contributor

Ko Whakarārā te maunga, ko Matauri te moana, ko Ngāti Kura te hapū, ko Ngāpuhi-nui-tonu te iwi.

Georgina Marjorie Stewart graduated with an MSc in Chemistry from the University of Auckland in 1982 and an EdD from the University of Waikato in 2007. From 1992 to 2004 she held teaching and management positions in Māori-medium and English-medium schools in Auckland and Whangarei. She now lectures in Māori Education at the University of Auckland. Her research explores the intersections between science, identity and education.

References

- Chalmers AF (1999) *What is this thing called science?* 3rd edn. University of Queensland Press, St Lucia
- Gilbert J (2005) *Catching the knowledge wave? The knowledge society and the future of education.* NZCER Press, Wellington
- Harding S (1998) *Is science multi-cultural? Postcolonialisms, feminisms, and epistemologies.* Indiana University Press, Bloomington/Indianapolis
- Hermes M (1998) Research methods as a situated response: towards a First Nations’ methodology. *Qual Stud Educ* 11(1):155–168
- Herrnstein Smith B (2005) *Scandalous knowledge: science, truth and the human.* Edinburgh University Press Ltd, Edinburgh
- Ladson-Billings G (2000) Racialised discourses and ethnic epistemologies. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*, 2nd edn. Sage, London, pp 257–277

- Locke T (2004) *Critical discourse analysis*. Continuum, London/New York
- Putnam H (2004) *The collapse of the fact/value dichotomy and other essays*. Harvard University Press, Cambridge, MA/London
- Rabinow P, Rose N (eds) (2003) *The essential Foucault: selections from essential works of Foucault, 1954-1984*. New Press, New York
- Rudolph JL (2010). Stakeholders and boundary work in the history of science education. Paper presented at the AERA 2010 annual meeting, Denver, Apr 2010
- Scantlebury K, McKinley E, Jesson JG (2002) Imperial knowledge: science, education and equity. In: Hernandez-Truyol BE (ed) *Moral imperialism – a critical anthology*. New York University Press, New York, pp 229–240
- Smith LT (1999) *Decolonizing methodologies – research and indigenous peoples*. University of Otago Press, Dunedin/New Zealand
- Stewart-Harawira M (2005) *The new imperial order: indigenous responses to globalization*. Zed/Huia, London/New York
- Thrupp M (ed) (1999) *A decade of reform in New Zealand: where to now?* School of Education, University of Waikato, Hamilton
- Young RE (1989) *A critical theory of education: habermas and our children's future*. Harvester Wheatsheaf, New York

Michael Roth

Abstract

In the social studies of science, inscriptions – everything that appears in research articles other than text – have been studied and theorized extensively. The data in research articles are often reported in the form of one or another inscription: data table, map, photograph, line graph, statistics, or mathematical equation. Not all inscriptions are equally abstract or equally powerful in the support they lend to the arguments/claims made by the author. In this chapter, I briefly sketch the theory of inscriptions and then discuss the various inscriptions mobilized in the different reports that I published based on one research study in an eighth-grade ecology curriculum.

Keywords

Inscriptions • Inscriptional continuum • Social semiotics • Knowledge/power • Qualitative-quantitative distinction

Introduction

This chapter is about the ways in which educators may use means other than words to articulate aspects of the phenomena that they observed during their research, including numbers, tables, statistics, and graphical means. I begin this chapter with a brief description of the (social) semiotics of inscriptions, which allows us to understand the forms of use and power of different forms of numerical information. I describe and use concrete examples of inscriptions that I have used to present the results from a study of learning in an eighth-grade science unit that I conducted while working as a science department head in a Canadian high school. The study was conceived as an ethnography (Fig. 66.1), and I use it here to show that even within an ethnographic study – and more so, of course, in a “quantitative” study that seeks to confirm causal relations – various forms of mathematical inscriptions may be used to strengthen data and claims. As

a trained applied mathematician and statistician who, by and large, conducts observational-interpretive research, I have not found the distinction between “quantitative” and “qualitative” research a very useful one for a variety of reasons (Ercikan and Roth 2006). In this chapter, I therefore go beyond the distinction describing how investigators from different methodological paradigms can think about inscriptions and their use to make the strongest case for supporting the claims and interpretations that derive from their research.

From the Social Semiotics of Inscriptions

In all forms of educational research, numbers are used to represent and thereby make salient and communicate some aspect of the setting and phenomena under investigation. These numbers may be transformed into other numbers, summarized in descriptive statistics, summarized into histograms, depicted pair-wise in line graphs, or used to make inferences about populations of which the group under observation is considered to be a representative sample. The various ways in which numbers in their raw and

M. Roth (✉)
School of Education and Professional Studies,
Griffith University, Nathan, QLD, Australia
e-mail: mroth@uvic.ca

transformed ways are deployed in support of a researcher's claims have come to be denoted by the term *inscriptions* (Latour 1987); these include numbers, statistics, graphs, maps, and equations. Inscriptions are useful tools for representing research because they can be made to travel unscathed – because of their nature of *immutable mobiles* – to different parts of the world – including other researchers and readers of research articles, and especially to “centers of calculation” where they are stripped of context, summarized, and accumulated into new inscriptions that now contain more information than any of the inscriptions in the previous stages of research. Because quantity of information is a measure of the extent of knowledge indexed and therefore also is a measure of the (political, institutional) power that its users wield (Foucault 1979). This accumulation of knowledge and power in centers of calculation is reified in the analogy of the panopticon, literally a device or place by means (from) which everything (Gr. *παν-* [pan-]) can be seen (Gr. *οπτικόν* [opticon]): the places in prisons that allow the total (temporal, spatial) surveillance of inmates, access to national statistics databases, or access to any other database that holds information on people (e.g., credit ratings). That is, the more inscriptions summarize, the more they play into the hands of those who produce, manipulate, have access to, and use them. Thus, in education, “quantitative” sociologists and experimental psychologists – because of the claims they make about entire populations (using inferential statistics) – not only tend to have more influence in political circles but also they tend to receive more funding more frequently and in greater amounts. Words do not easily lend themselves to such transformations. Therefore, however good a text alone may be in producing a story that marks and remarks (notes and denotes) sense and meaning, policy makers and legislators do not (or little) draw on interpretive studies as resource for shaping and implementing policy.

At this point it is opportune to comment on the distinction – generally made on false grounds (Ercikan and Roth 2006) – between “qualitative” and “quantitative” research. The distinction between forms of research ought not be made on the basis of whether a researcher uses numbers, graphs, histograms, means, standard deviations, and so on. There is no reason why interpretive research concerned with how people make sense in particular situations may not (cannot) use mathematical means to represent frequencies or relationships using numbers, because cultural-historically, numbers have been integral to all human sense-making activities. Rather, one of the real issues is whether research claims pertain to: (a) the group of individuals participating in the research, or (b) a larger *population* of which participants are considered to be a *representative sample*. In the former case, the researcher does nothing other than summarize, in one way or another, relevant phenomena in a given group: it is a

form of grounded theory, which does not generalize from a sample to a population. In the latter case, researchers make claims that pertain to a population based on what they learn from the (much) smaller sample. This generalization is fraught with a possibility of making a wrong inference – claiming that there is a difference when there is none in the population (statisticians know this as *type I error* or *false positive*) or claiming that there is no difference when there is one in the population (for statisticians, *type II error* or *false negative*). Statistics provides measures for the likelihood of such errors. The second real issue in using numbers pertains to the question of “measurement instruments.” Here, too, one needs to distinguish between, for example, (a) counting how many individuals “agree,” “disagree,” “strongly disagree,” and so on with a particular statement, and (b) claiming to measure something like “attitude,” “motivation,” “intelligence,” “knowledge,” or “achievement.” In the first instance, there is no reason why a “qualitative” researcher should not count; in the second instance, there are serious issues involved not only in quantifying the “amount” of “attitude,” “motivation,” “intelligence,” “knowledge,” or “achievement,” but also in establishing the variables (qualities) themselves.

Whereas there is a hierarchy of inscriptions, it is not always the case that one is “higher up” (e.g., graph) than another (e.g., table), even when they are used in research articles in support of a particular claim (Bastide 1990). A table of raw or computed values may be more powerful than a graph (see example below) because it makes visible the particular phenomenon much clearer than the latter. In other instances, a series of photographs may provide more (visually) powerful support to a claim than the corresponding numerical data presented in a table or a graph. For example, astrophysicists receive data from outer space in the form of numbers, but they generally create color images to communicate their findings because these are much more powerful representations than the number when it comes to feature their phenomena of interest. In fact, the images are created according to the differing aesthetic needs of the audience so that the same astronomers will use different coloring thresholds when representing their findings in a scientific (academic) journal, *Scientific American*, or in the popular press (Lynch and Edgerton 1988). These differences in representational practices also illustrate differences along the power/knowledge dimension: scientists, because they can be more critical readers, are provided with different images than lay readers who cannot interrogate the representations published.

We can learn from this that the choice of a particular inscription is a function of the audience, which, although generally practiced in the everyday world – a professor tells her spouse what has happened during her day differently while talking to her husband, children, colleague, or friend – is a principle that as an editor I have seen many authors

violate. The choice depends on the rhetorical power of the inscription in the relationship between author and audience rather than on some abstract principle about the quality or power of inscriptions. Authors choose their representation to tell a watertight story, one that does not (easily) support alternative interpretations; a good story is one that readers buy into because the author has done everything possible to shore it up against alternative interpretations (Bastide 1990).

Inscriptions based on numerical information are prevalent in educational research, both in the so-called qualitative and quantitative paradigms, a distinction. Thus, an ethnographer may count how many students in a class engage in one practice (e.g., bullying) and contrast it with the number of students who engage in another practice (e.g., community-building efforts). The same ethnographer may wonder whether boys and girls engage in these practices in equal frequencies and create a table in which the observations (counts) are recorded. A question imposes itself: "How are such results to be reported in a research article?" The ethnographer may simply provide the numbers in textual format; or she may feature the table in the article. But she may also ask: "Is this class that I observed representative?" "Are the differences I observed characteristic of *all* such classes in this nation?" The latter question only can be answered using some statistical test that allows her to establish the probability that the differences would be observed in the population, that is, in all those classes for which the observed class is representative of. A chi-square (χ^2) test, for example, would allow her to make such an assessment. How she would report her results, therefore, depends both on her audience for which she is writing *and* on the kinds of questions and theoretical frameworks that she has.

Background of the Case Materials

In this chapter, I articulate the use of numerical and graphical representation of data by drawing on a study that I conducted together with my colleague G. Michael Bowen while we were teaching science in a private school (I also was department head of science). I was interested in finding out what students were learning while engaging in open-inquiry science, that is, when students learned science in the process of conducting their own research without any direct instruction provided; and I was interested in finding out how much the student collective, thought as "community of practice," supported the learning of small groups and individual students (for example, Roth and Bowen 1995). Michael Bowen was responsible for the curriculum design, accommodating my requests for special tasks designed to confirm or disconfirm research hypotheses, whereas I was responsible for research design, data collection, transcription, and so on.

In the course of the 10-week ecology unit, the students conducted five projects: The first task asked them to map the

50-acre campus and to find out where they would like to situate a 40-squaremeter plot; in the course of the following four projects, students were asked to find out about their plot as much as they could by posing and answering research questions that in some cases include three dependent and three independent variables (Roth and Bowen 1993). Students spent about two out of every three lessons in the field (Fig. 66.1), collecting data into their field notebooks, thinking up new research questions, taking note of phenomena that previously had been invisible to them, and so on. To scaffold their learning, and in fact, to bring about a cognitive apprenticeship into science, the teacher made available a variety of textual resources including field guides for identifying plants and animals, methods books, and encyclopedias and dictionaries; he also made available research tools including soil thermometers, soil corers, pH meters and paper indicators, and measuring tape. Every now and then students presented and defended their work to peers from different groups.

Overall, the studies we published provided evidence for the tremendous learning students exhibited, which despite the absence of lectures went far beyond what the ministerial curriculum guidelines specified. One important realization that the students in this class made was that when they used qualitative indicators to support their claims, (a) their peers were much less convinced about the factual nature of the findings so that it was easy to construct them as artifacts, and (b) the findings of similar research projects in different sites conducted by different groups could not easily be compared. Increasingly, therefore, the students on their own switched to more mathematical and graphical representations of their work, that is, they mathematized their experiences in the field to an increasing and measurable extent (Roth and Bowen 1994).



Fig. 66.1 Data collection. *Notes:* This video off-print shows two eighth-grade students collecting data to answer research questions that they have articulated. Their task is to find ways of representing their research and findings such that their peers are convinced about the scientific rigor and the trustworthy nature of their findings

I conceived the study as an ethnography, where observations and video-recordings constituted the major data source (Fig. 66.1). In addition, I photocopied all students' reports, field notebooks, unit tests, final examinations, and report cards. I also conducted several formal experiments in which students on their own or in groups completed task-based problems that one or more of their peers had faced during their research. These experiments allowed me to test hypotheses about the degree to which students mathematized their experience. I interviewed students informally while accompanying them into the field and formally in my preparatory room or office. I also administered the *Constructivist Learning Environment Scale* (CLES) (Taylor and Fraser 1991), an instrument designed to "measure" the degree to which students appreciated/enjoyed autonomy, negotiation of meaning with others, self-directedness of their studies, and degree to which they are able to integrate their prior knowledge. I used this instrument because it had been designed specifically by and for constructivist teachers and because the items were congruent with dimensions of learning involved in open inquiry.

Summarizing Within Cases Versus Generalizing to Populations

As editor of international journals and as professor of research methods courses, I receive many studies and investigations in which the (budding) researchers use fuzzy quantifications such as "many," "some," and "few" rather than stating, for example, that "8 out of 10 students approached a task in some way" or that "2 out of 13 teachers taught in ways consistent with (social) constructivism." Just a week prior to writing this chapter, as a consultant to a large research effort funded by the Economic and Social Research Council (UK), the lead researcher apologized to me for counting and using means. He stated that his team used questionnaires, instruments, and summary statistics to satisfy the ESRC. To me, there is no harm whatsoever in mathematizing quantities rather than providing them in indeterminate, interpretively flexible, and often-misleading form. We can learn from the eighth-grade students that using quantifications such as "many" or "few" does not allow easy cross-site comparisons when different investigators attempt to answer the same or similar research questions. As I show in this section, mathematization practices such as counting, calculating means and standard deviations, or creating histograms do not constitute "quantitative" as opposed to "qualitative" research, but are practices that constitute integral part of any human endeavor to make sense. This can be seen from Table 66.1, which summarizes the numbers and types of inscriptions that the eighth-grade students in two classes taught by Michael Bowen produced during the four

Table 66.1 Data table

	Research project				Exam
	1	2	3	4	
<i>N</i>	16	17	20	10	40
Type of representation					
Description (using numbers)	44	35	60	80	–
Map (including measurements)	38	41	70	70	65
Table, List	75	76	70	80	28
Average	25	47	45	70	70
Graph (bar, x-y)	56	59	60	90	45
Equation (fraction, %)	26	18	20	30	–

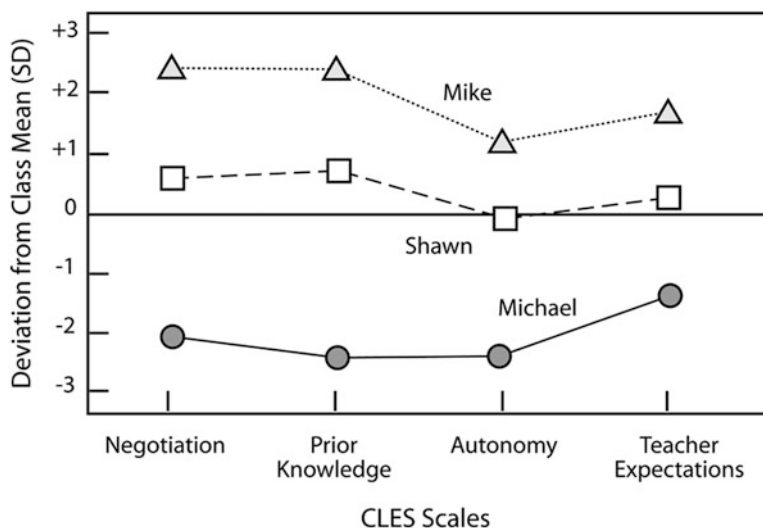
Notes: In this table, the researchers provide counts for each category of inscriptions that the eighth-grade students produced during their 4 open-inquiry research projects and during an exam. Most student reports used more than one type of inscription. We counted the types of representations rather than their total number in each report or exam. Frequency (%) of six representations used by grade 8 students in an open-inquiry learning environment across four laboratory reports and one exam

research projects and the examination (which I took to be an indicator of the extent to which students had appropriated and evolved mathematization practices).

Based on existing work (Latour 1987), I established categories of inscriptions that roughly followed the chain of increasingly complex and abstract representations; I then counted how many inscriptions were produced in the two participating eighth-grade classes and calculated the frequencies within each category. I made no claims about the frequencies with which eighth-grade students *in general* produce inscriptions of a particular type. Thus, although the study uses numbers and frequencies, it does not report measuring an underlying quality (variable) and is not used to generalize beyond the actual group of participants. This would have been different had I used the third eighth-grade class in the same school – taught by another teacher who had not participated in the open-inquiry curriculum – and had I compared the frequencies of representations produced for the purpose of supporting a claim about the extent to which an open-inquiry curriculum more than a regular science curriculum *causes* eighth-grade (or middle school) students *in general* to develop mathematization practices.

The following examples of inscriptions in educational research show that the distinction between "qualitative" and "quantitative" studies is sliding, requiring careful analysis of what a researcher is assuming and doing. Thus, in the study of learning in an eighth-grade open-inquiry curriculum, I used the CLES that I had come to learn about not long before doing this teacher-as-researcher project. The CLES consists of 28 statements categorized along four dimensions, *Negotiation* ("In this class, I talk with other students about the most sensible way of solving problems"), *Prior Knowledge* (e.g., "In this class, I think about interesting real life problems"), *Autonomy* (e.g., "In this class, I decide how

Fig. 66.2 Profile graph. *Notes:* This graph compares the Constructivist Learning Environment Scale scores of individual students to the class mean. The *abscissa* is not a continuous but a categorical variable and the lines therefore establish profiles rather than depicting continuous variation



much time to spend on an activity”), and *Student-Centeredness* (“In this class, the teacher expects me to remember things I learned in past lessons”). It was designed to “measure” the extent to which students perceive their learning environments as consistent with a constructivist epistemology. One possibility for presenting the results of student responses as a survey and to count the frequency of students who strongly agree, agree, . . . strongly disagree with each statement. Nothing “quantitative” enters the research in this approach. On the other hand, a measurement aspect enters when an answer such as “strongly agree” is converted into a score such as “5.” Again, there is nothing inherently wrong in using a score of 5 as a different way of expressing a statement such as “I agree a lot” to be compared to a score of 1 as an expression “I don’t agree at all (strongly disagree).” But as soon as the score of 5 in response to one statement is added to the score of 5 on another statement to yield 10, the assumption has been made that the two questions and responses are exchangeable and that “agreeing a lot” to one question has the same sense as “agreeing a lot” in response to the second statement.

Depending on the degree of abstraction the researcher is willing to do, the results of CLES can be used for achieving different levels of generalizations. For example, we can calculate the sum of the scores of the 7 statements within each category and compute the class mean and standard deviation. Thus, following other ethnographic researchers at the time (cf. Tobin and Fraser 1998), I plotted individual student profiles, that is, the extent to which selected students featured in a research report deviated from the class mean (Fig. 66.2). To achieve a “profile,” the individual points for each student are connected despite the fact that there is no continuous variable on the abscissa. The graph, much better than a table with individual students’ scores, allows us to see that Mike, for example, consistently agreed or strongly agreed with the (positively-framed) statements and therefore

represented one type of extreme. At the same time, Fig. 66.2 easily reveals that his classmate Michael constituted something like the opposite extreme, whereas Shawn responded around the class mean and therefore represented something like the “average” or “normal” student experience.

We abstract a little more when the scores of individual students are added to form a class score, which is then to be compared to the scores of other classes. Further abstraction occurs when the scores of classes within a school are pooled to be compared to the scores of other schools – such as this occurs when schools are compared based on “student achievement” or when countries are compared based on student responses to PISA or TIMSS items.

Yet another type and level of abstraction occurs when we take the scale scores on different items and ask whether students who tend to agree and strongly agree with one type statements (e.g., “Negotiation) also tend to (dis-) agree and strongly (dis-) agree with statements of another type (e.g., “Autonomy”). The results of such an analysis is provided in Fig. 66.3, which also presents a line of best fit (regression curve) that exhibits the trend in the scattered data points. Two types of claims can be made. First, a researcher simply reports that there is a trend and provides the slope and intercept of the trend line. This is descriptive information. Second, a researcher might be interested in attempting to generalize to *all* eighth-grade (middle school) students in such a learning environment. The question then would be whether the trend observed is a good estimate of the trend that would be observed in the population comprising all eighth-grade students. The p -value provided in the caption ($p < 0.05$) suggests that the possibility of being in error by making such a claim is less than 5 %, which, in most social sciences, is an acceptable risk.

I could have used Fig. 66.3 in my research reports: some researchers frequently do so. But I felt that such a graph

Fig. 66.3 Correlation. *Note:* Correlation of two variables from the Constructivist Learning Environment Scale with regression curve ($r = 0.37$, $p < .05$, slope = 0.30, intercept = 15.60)

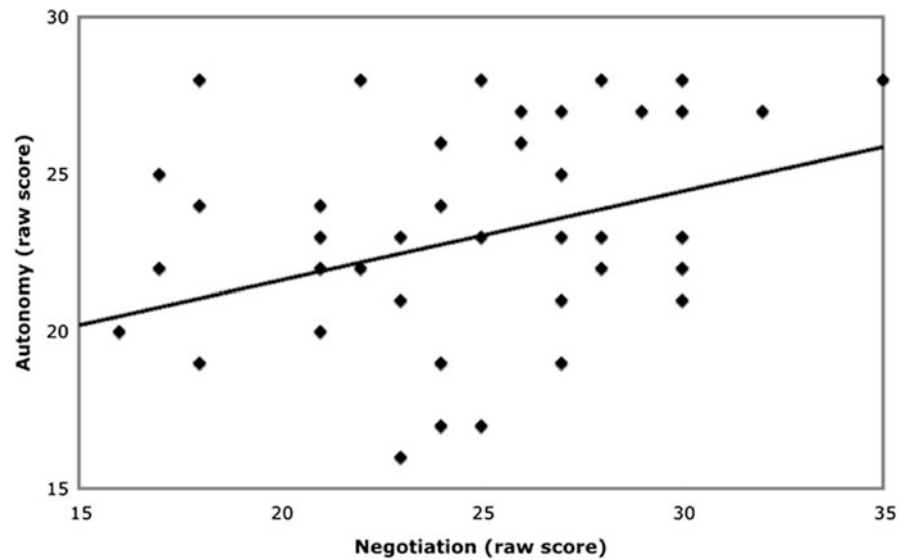


Table 66.2 Correlation matrix

	Autonomy	Term mark	Unit test	Exam (Biology section)
Negotiation	.37*	-.01	.16	.16
Autonomy		.45**	.48***	.42**
Term mark			.82***	.41**
Unit test				.45**

Notes: All probabilities are 2-tailed. This correlation matrix makes available to Pearson product moments for 10 pairs of variables, some considered being measures of attitude, others considered being measures of achievement

Correlations between attitude and achievement

* $p < .05$; ** $p < .01$; *** $p < .001$

would not have been very useful because it does not convey anything other than a Pearson correlation (i.e., $r = .37$). Moreover, if there are many variables, then a table including all correlations and their p -values (“significance levels”) is much more parsimonious and informative (Table 66.2). Thus, whereas graphs sometimes are more powerful devices than tables (Bastide 1990), in this particular case the table turns out to be more powerful than the graph, especially in the context of the article, which was submitted to and published in a journal catering to applied cognitive scientists, cognitive psychologists, and learning scientists. Readers readily will infer from the p -values that the information provided in Table 66.2 was intended to generalize beyond the two classes that had participated in our research project.

The table 66.2 shows that student achievement – as measured by term mark, unit test, and exam – correlated significantly to the measure of Autonomy but not to the measure of negotiation, which, as previously seen (Fig. 66.3), correlated with autonomy. To provide an indication of how much of the variance in achievement was related

to the four learning environment variables of CLES, I did another transformation by using a multivariate statistical test. Such tests, represented in the form of specific statistical indicators, are more powerful because they encompass more than two variables at a time. In my situation, this test suggested that 29 % of the variance of achievement could be accounted for by the CLES variables and that there was less than 1 % chance that I would be in error assuming that this variance existed in the population (i.e., $R^2 = .29$, $p < .01$). Only “Autonomy” was significantly related to student achievement as measured by the section of the final exam directly related to the unit (which can be considered a delayed posttest). The total variance explained by the classroom environment variables was 21 % ($R^2 = .21$, $p = .06$). Because of the extent to which Michael Bowen had encouraged student autonomy, the correlation of these variables to cognitive outcome was of particular interest. The results in the table also suggest that there was no relationship between achievement and the extent to which students agreed with statements about the opportunities they had to interact, negotiate meaning, and build consensus (i.e., “Negotiation”).

Correlation Versus Causation

Understanding *why* things happen is one of the main goals of research both in the social and in the natural sciences. Even among “qualitative” researchers, there are many who use terms such as “X (is the) cause(s) (of) Y” or “X impacts Y.” Such statements, however, imply causation and only very specific kinds of research can assert to have the data that allows claims about causality. However, there are different types of answer to why questions, some of which are computable (predictable), others which are not. The ability to

make legitimate causal statements is a function of the inscriptions produced and used in reporting the research. Among the computable ones are those that establish relationships between two or more variables or that establish (mechanical) forms of causation, such as when an educational sociologist claims that “socioeconomic status correlates with achievement (school success).” On the other hand, saying “the student shot his classmates because they were bullying him” neither establishes causation nor is it computable. Here the “because” indicates what the student’s grounds for action have been. However, because true human decisions are non-computable (Derrida 2005) – there are many other ways of dealing with bullying – he could have acted otherwise. Grounds for actions are not causes in the natural scientific sense. Numbers play an important part in representing either summaries (covariations) or in establishing causation. But numbers also lead many to confuse co-variation and causation.

While looking through the research reports students submitted and through their field notebooks, I had the hunch – i.e., tentative hypothesis – that they preferentially drew on graphs when larger datasets were involved but made claims about trends based on the data in lists or tables. How could I find out whether the size of datasets had any impact on using graphs and other strategies? Does the number of data points *affect* (cause) the representational strategy students choose to depict the results of research? Are the strategies related to school mathematical ability (as measured by achievement)?

To answer these questions, I designed an experiment in the classical manner: I randomly distributed three forms of the same task – a geographical map divided into 5, 8, and 17 fields containing two measurements each and the question whether there is a relationship between the two variables represented by the measurements – in the two participating classes. Because the task was randomly distributed, the results of the study could be used to make statements such as “the size of the dataset *causes* choice of mathematical representation.”

It turned out that about equal numbers of student groups in the three conditions (size of dataset) used graphs, other mathematical representations and inscriptions. Thus, the “directional” hypothesis “size of dataset *determines* choice of representation” had to be rejected. But I was also interested in knowing whether mathematics achievement would predict choice of representation. To do this, I used a test called “discriminant analysis,” which allows the researcher to make predictions about a category of person ([not] using a mathematical representation) based on some measure, which I chose to be mathematics achievement (ability). Based on their mathematics term mark, 70 % of the cases were classified correctly and 17.1 % of the variance was accounted for. Based on this test and the particular form of inscription it provided me with – i.e., $\chi^2(1) = 7.62, p < .01$ – I was able

Table 66.3 Comparison table

	Frequency of inscriptions used (%)					
	Transformed ^a					Not transformed
	Graph	Average	Ordered table	Pattern map	List	
Pre-service teachers (<i>N</i> = 32 individuals)	13	6	25	19	3	47
Eighth grade (<i>N</i> = 19 pairs)	37	11	11	16	0	42

Notes: This table merely summarizes the frequencies with which individuals/pairs in two participant groups responded to a task Table of inscriptions used by pre-service teachers and grade 8 students
^a Three pre-service teachers constructed two (2 Ss) or three (1 S) types of mathematical inscriptions for a total of 19; 1 pair of Grade 8 students each used two and three types of inscriptions, respectively

to claim that “groups with higher mathematics achievement were more likely to transform the data into a graph, ordered data table, or pattern map; groups with lower mathematics achievement were more likely to provide an answer based on inspection of the map alone.” In contrast to the first research question, however, this claim cannot be taken as a causation in the strong sense – I, the researcher, had not varied the independent variable as I had done by constructing the different tasks.

I also wondered whether causal claims could be made about the curriculum. To get a sense of what our students had achieved in comparison to others – as a sort of legitimization of what we are doing if someone like the school administration or ministry of education officials raised questions – I wanted to be able to make statements about eighth-grade (middle school) students participating in open-inquiry science curriculum and individuals who did not. To do this I needed a comparison group that did not engage in open inquiry. An evident comparison group consists of future science teachers, as they are often asked to implement scientific inquiry in their teaching. The future science teachers in my sample made for an interesting comparison group because they already had completed at least a bachelor degree in science (or mathematics) and some had obtained Masters and even PhD degrees. I reported the results of the research in the form of a table similar to Table 66.3. The table, however, merely *summarized* the answers in the two groups broken down according to the different inscriptions they used to transform the data in the task. Any “qualitative” researcher can use such a table to present frequency counts in this manner without feeling to be committing “treason” to the “qualitative” cause. That is, the table did not yet allow me to make claims about causation. A different form of inscription was required.

I decided to conduct comparative tests even though the eighth-grade students had worked in pairs whereas the

pre-service teachers had completed the tasks on their own. To see whether the results would allow me to make statements about differences that generalize to the two populations of which the participants were part – i.e., middle school students doing open inquiry, pre-service teachers with science degrees – I conducted two statistical analyses that would tell me whether the distributions of representations used were similar in the two groups. For the first analysis, I classified the responses from the table in Table 66.3 into two categories: the data in the task were or were not transformed. The statistical test shows that there would not be a difference between the two populations, as shown by a chi-square test ($\chi^2(1) = .00, p > .05$). The p -value greater than 0.05 meant that the risk of making an erroneous claim (type I error) was larger than 5 %, and the risk therefore was too large to be acceptable. On the other hand, when I grouped the responses from the table into “more abstract representations” (graph, averages), “less abstract representations” (ordered table, pattern map, list), and “no transformation” (text-based), there was a statistically detectable effect ($\chi^2(2) = 6.80, p < .05$). I therefore was able to make the *general* claim that eighth-grade students after completing an open-inquiry science unit would use more-abstract inscriptions with a higher frequency than pre-service teachers who had not participated in such a curriculum.

From this section, readers can learn that there is a continuum of mathematization and generalizability of research. For example, the table (Table 66.3) does not allow us to make claims other than about matters of fact – this is what I observed. It is not even sufficient evidence to make a sound decision about using versus not using open inquiry in one’s own classroom with another class during the same or subsequent school year. This is so because using precisely the same teaching strategy with a different group of students *presupposes* the generalizability of the approach within the population of students. To support such a generalization, statistical inscriptions are required that allow us to estimate the error rate associated with it. Only research with a comparison group allows us to legitimately make such a generalization.

Complex “Maps”

Tables, graphs, and statistics are not the only way of presenting quantitative research findings. Maps, for example, are pervasive ways of representing relationships not only to depict locations and distances but also, for instance, to perceptually articulate temporal relations. Maps can also be used to depict several forms of relation simultaneously. For example, researchers might be interested in depicting the movement of students during one lesson in a classroom

organized like an open-design studio, where students move about to work at different dedicated station, such as a water station, tables set up to be used in conjunction with power tools, or stations prepared to be used for (messy) gluing operations (Roth, McGinn, Woszczyzna and Boutonné 1999). The use of maps in my research began in the eighth-grade ecology unit where I was interested in better understanding how processes at the classroom (community) level are related to learning in and by small groups or on the individual level. In representations such as Fig 66.4, information about the complex forms of learning in communities can be depicted and made available to mark and remark sense.

The research project about learning in an eighth-grade open-inquiry learning environment also included questions about the relationship between learning at the whole-class, small group, and individual levels. Such questions emerged in the situation because as a teacher I was asking students to work in groups or to discuss problems and issues in whole-class forums. Do these teaching strategies support the learning of individual students, who were required to exhibit what they learned in individual tests and examinations? Thus, the project also became an opportunity to study the relation between multiple levels of analysis.

To support the claim about how a particular practice (using graphs to solve certain types of questions) “diffused” within the eighth-grade classroom, I produced a map that depicted information along several different dimensions (Fig. 66.4). First, it encoded temporal information about the adoption of the practice (early [black circles], late adopters [grey circles]) and categorical information

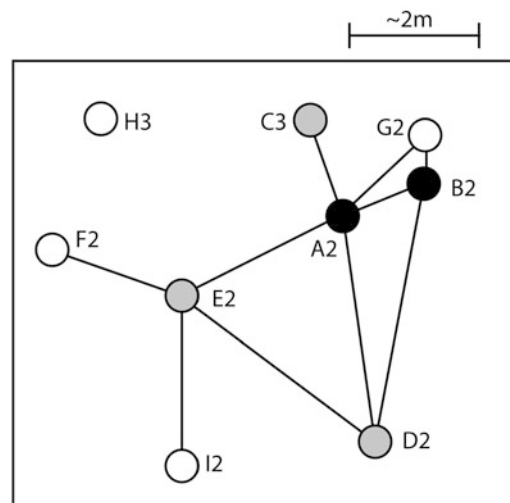
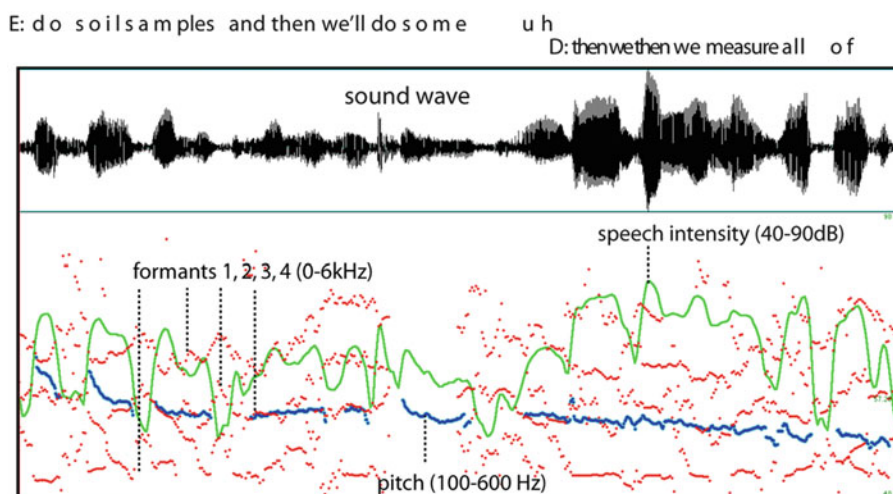


Fig. 66.4 Map. *Notes:* This map summarizes a complex set of relations during one data analysis task. The information provided includes size of student groups (numbers following letters), geographical location and distance between groups, between-group interactions (*lines*), and time of adoption of a graphing strategy (early [*black*], late [*grey*], and non-adopters [*white*])

Fig. 66.5 Prosody graph. *Note:* Sample output from the PRAAT software for the analysis of prosody that allows strong claims about emotions unconsciously expressed in and through the voice



(adopters [colored circles], non-adopters [white circles]). Further temporal information was encoded in the sequence of adopting groups from A to E. The map also encoded group sizes (number following the letter) and information about groups that interacted – e.g., group A interacted with groups B, C, D, E, and G whereas group H did not interact with any other group. The map provided information about the relative geographical location of the groups in the same classroom and about the approximate distances between groups – see the scale. Thus, group H was separated by more than 2 m from the nearest groups C and F.

Such maps can be used to support claims about categories, clusters, or classes of phenomena, as I have shown in subsequent research about learning in “communities of practice.” Thus, for example, plotting and clustering the different positions a teacher may take in the classroom, I was able to show how teacher participation in discourse during whole-class discussions differs with the physical position he or she held (Roth et al. 1999). In that case, too, I was able to provide readers with a clear sense of how the clustering was achieved based on the physical distances within a cluster versus those between clusters of positions.

New Directions: Prosody and Emotion

In recent years, I have charted new terrain with the representation of social phenomena in the research literature. For example, based on the fact that humans unconsciously express emotions through their voice and based on the existence of sociological theories of emotion, I began to analyze different parameters of students’ and teachers’ voices for the purpose of supporting claims about social processes (e.g.,

Roth 2007). Software packages – e.g., the multi-platform PRAAT (www.praat.org) – provide mathematical and graphical means for analyzing voice parameters including sound wave, pitch and higher frequency components (i.e., “formants”), speech intensity, and speech rate (Fig. 66.5), and other parameters including mean speech intensity and energy or mean pitch over a period of time.

Figure 66.5 exhibits a moment of interaction between two of the participating eighth-grade students, Erica and Dilraj. The speeding up and slowing down of the speech can be taken from the distances between the letters of their utterances and pauses are available from the representation of the sound wave the students produced in speaking. The analysis of the pitch shows that Dilraj begins to speak at the same pitch level with which Erica ended – a phenomenon that several studies show as expressing cognitive alignment and non-conflict. The pitch and intensity peaks on “do” and “soil” together with the drawn out nature of the phoneme clearly exhibits how these words rather than others were emphasized, allowing me to make claims about the relative importance of specific words over others. Here, it is not merely a matter of how *I* heard the students but one of being able to provide clear evidence for changes in speech and, correlatively, in emotion and stance that every reader can analyze and interpret. I was able, for example, to show that the ways in which teachers articulate words increasingly comes to resemble the ways of other teachers with whom they work together harmoniously in the same classroom, whereas there are strident pitch differences when the teachers work together in a conflictual relation. Inscriptions such as Fig. 66.5 provide stronger evidence for the phenomena I describe than had I used words alone.

Conclusion

In this chapter, I have presented different ways in which researchers can quantify and depict the phenomena that they are reporting in an article, chapter, book, or thesis. Using numbers and other mathematical representations does not inherently distinguish “qualitative” from “quantitative” research; rather, my own experience shows that ethnographic (interpretive) research becomes much stronger (more credible) when it is supported by quantified evidence rather than by evidence that leaves quantification implicit. To be able to say that something happens more frequently than something else inherently constitutes quantification and I see no (or little) reason for avoiding the labor involved in doing the actual counts. The ultimate criterion for using this or that mathematization and representation practice is the strength of the evidence that can be achieved; and this is so for all forms of research whatever the level of generalization it attempts to achieve. Some inscriptions are better than others in making the phenomenon stand out; these will therefore constitute the choice for the author.

Note on Contributor

Michael Roth is Lansdowne Professor of Applied Cognitive Science at the University of Victoria, and Professor, School of Education and Professional Studies, Griffith University, Australia. He studies knowing and learning across the life span, mostly related to the sciences and mathematics. He has published more than 300 refereed journal articles, 36 books, and nearly 150 chapters. He is editor of *Mind, Culture and Activity*, a journal that focuses on the cultural historical dimensions of knowing and learning.

References

- Bastide F (1990) The iconography of scientific texts: principles of analysis. In: Lynch M, Woolgar S (eds) *Representation in scientific practice*. MIT Press, Cambridge, MA, pp 187–229
- Derrida J (2005) *Pardonnez-moi: L'impardonnable et l'imprescriptible*. L'Herne, Paris
- Ercikan K, Roth W-M (2006) What good is polarizing research into qualitative and quantitative? *Educ Res* 35(5):14–23
- Foucault M (1979) *Discipline and punish: the birth of the prison*. Vintage, New York
- Latour B (1987) *Science in action: how to follow scientists and engineers through society*. Open University Press, Milton Keynes
- Lynch M, Edgerton SY (1988) Aesthetics and digital image processing: representational craft in contemporary astronomy. In: Fyfe G, Law J (eds) *Picturing power: visual depiction and social relations*. Routledge, London, pp 184–220
- Roth W-M (2007) Emotion at work: a contribution to third-generation cultural historical activity theory. *Mind Cult Act* 14(1/2):40–63
- Roth W-M, Bowen GM (1993) An investigation of problem solving in the context of a grade 8 open-inquiry science program. *J Learn Sci* 3(2):165–204
- Roth W-M, Bowen GM (1994) Mathematization of experience in a grade 8 open-inquiry environment: an introduction to the representational practices of science. *J Res Sci Teach* 31(3):293–318
- Roth W-M, Bowen GM (1995) Knowing and interacting: a study of culture, practices, and resources in a grade 8 open-inquiry science classroom guided by a cognitive apprenticeship metaphor. *Cognition Instruct* 13(1):73–128
- Roth W-M, McGinn MK, Woszczyzna C, Boutonné S (1999) Differential participation during science conversations: the interaction of focal artifacts, social configuration, and physical arrangements. *J Learn Sci* 8(3/4):293–347
- Taylor PC, Fraser BJ (1991) CLES: an instrument for assessing constructivist learning environments. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Wisconsin, Lake Geneva, Apr 1991
- Tobin K, Fraser BJ (1998) Qualitative and quantitative landscapes of classroom learning environments. In: Fraser BJ, Tobin KG (eds) *International handbook of science education*. Kluwer, Dordrecht, pp 623–640

Lilian Pozzer-Ardenghi

Abstract

Inscriptions represent data in different ways, and they also affect the reader in different ways. Photographs are believed to be realistic representations of the world, differing from graphs in their level of abstractness and their power of synthesizing complex information. The work of reading photographs is similar to the work of reading the world around us, which makes photographs easily accessible to audiences. This accessibility and perceived realism contribute to the power a photograph has in exerting a strong emotional impact on the public. Likewise, certain forms of qualitative, visual, arts-based and narrative *re-presentations* of research phenomena provide deeper levels of audience engagement with the “text”, and, depending on the purpose of our research, may be the most appropriate way for representing phenomena and providing *evidence* for our claims.

Keywords

Inscriptions • Photographs • Social semiotics • Qualitative-quantitative distinction

In educational research, numbers seem to be given a privileged position; *scientific* ways of representing research findings, such as graphs and tables, are still considered to be the preferred means of validating research and making its results credible. Inscriptions that represent mathematical, statistical information are taken as *evidence* for particular claims and facts research is attempting to establish. As Michael says in this volume, “The ultimate criterion for using this or that mathematization and representation practice is the strength of the evidence that can be achieved” (Roth, p. 512). The issue then becomes one of selecting what works best as evidence. The strength of the evidence, however, may not reside exclusively on its potential for validating a proposition emerging from the data, but also on its impact on the reader and consumer of research. Much like a photograph in a science textbook, the use of qualitative, visual, arts-based, and narrative approaches to research

in education can be very effective and powerful in communicating research findings, an outcome that numbers and graphs, no matter how powerful and “credible” they might be, are not equal to accomplish.

In this response piece, I discuss the work of interpreting photographs and its use and function in science textbooks as an allegory for a discussion of the appropriateness of different means of presenting *evidence* for our research claims. As Roth points out, “some inscriptions are better than others in making the phenomenon stand out” (p. 512); likewise, some forms of inquiry are better than others for investigating and providing *evidence* for a particular phenomenon, claim, or argument. Taking these positions as my point of departure, in this piece I explore the contention that it is the purpose of the research that should drive the choice of methods and the selection of the best way to *re-present* its results.

L. Pozzer-Ardenghi (✉)
Faculty of Education, University of Manitoba,
Winnipeg, Manitoba, Canada
e-mail: Lilian.Pozzer-Ardenghi@ad.umanitoba.ca

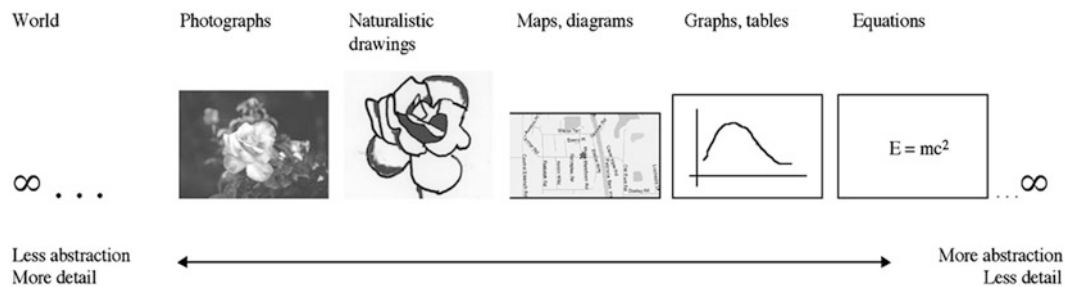


Fig. 67.1 Inscription continuum. *Note:* Towards the *left*, inscriptions become less abstract and present more contextual details; moving to the *right*, the opposite occurs, with inscriptions presenting more

complex information in more abstract form (Originally printed in Pozzer and Roth 2003)

The Power of Photographs: Is a Picture Worth a Thousand Words?

In my research on the prevalence and function of photographs in science textbooks (e.g., Pozzer and Roth 2003; Pozzer-Ardenghi and Roth 2005) I analyzed this type of inscription not as a self-evident and realistic representation of phenomena, but as a form of representation that requires particular types of interpretive work from the part of the readers in order for it to achieve its representational power. In the inscription continuum (Fig. 67.1), photographs occupy the leftmost position, closer to the observed, lived-in world. They are less abstract and contain more details than other inscriptions, such as graphs and tables, which are more abstract and can “pack” much more information than photographs. However, the amount of contextual details a photograph contains, which renders it more realistic, also creates innumerable possibilities for interpretation of what is to be seen in the photograph.

Arguably, the more details a photograph has, the more realistic it becomes in terms of specifying the “real-world” entity it is purportedly representing; however, the very details that provide for this specificity are also responsible for the inherent indeterminacy of meaning in the photograph. One can only identify the entity represented in the photograph if one already knows what it is representing. Take Fig. 67.2, for instance. This photograph originally appears in a biology high school textbook. The caption accompanying it reads, “Epiphyte plant.” Even when we do read the accompanying main text, which explains that an epiphyte plant is a plant that grows upon another plant, non-parasitically, we may still have doubts about what exactly is the epiphyte plant in this photograph. The amount of background details – what Bastide (1990) calls “gratuitous details” – makes the work of identifying the epiphyte plant in this photograph more difficult; however, these details also make the photograph appear more natural, providing clues for how epiphyte plants look like in their natural habitat.



Fig. 67.2 Epiphyte photograph. *Note:* Photograph extracted from a high school textbook, where it was originally reproduced in colour. Even though the word “Orquidea” [orchid] can be seen in the *bottom right corner* of the picture, we still need to know in advance what an orchid looks like in its natural habitat to be able to see it in this image (Reproduced with permission from the copyright holder)

Thus, just as other forms of representation, photographs need to be accompanied by specific instructions to guide readers towards seeing the *evidence* it is providing. If the photograph in Fig. 67.2 is to be taken as evidence of what an epiphyte plant looks like in its natural habitat, readers must be guided through the various visual resources available in the photograph so that they are able to distinguish what *is* the epiphyte plant in this picture. Nonetheless, as a means to illustrate particular phenomena, photographs are still very powerful and widely used in science textbooks; indeed, they are the most abundant type of inscription in the biology textbooks we analyzed (Pozzer and Roth 2003). Part of the allure comes from the familiarity with which we engage in the interpretive practices required to read and make meaning out of a photograph; even if we do need guidance to appropriately identify specific items among various other items

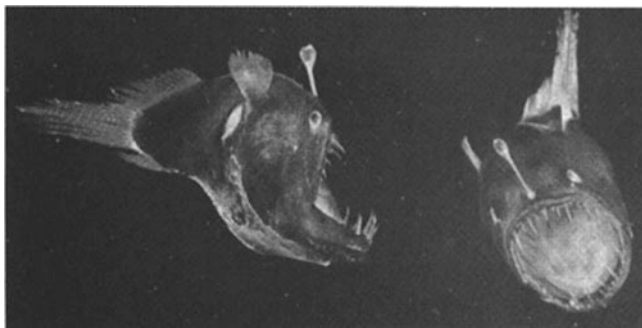


Fig. 67.3 Fish photograph. *Note:* Photograph extracted from a high school textbook, where it was originally reproduced in colour. The size of the fish in real life is almost the same size as it is represented in this picture (Reproduced with permission from the copyright holders)

depicted in a picture, the work of interpreting it is identical to the one that we routinely do in our everyday lives as we go about observing and making sense of the world. These interpretive practices differ quite drastically from the work of interpreting a Cartesian graph, for example. Even numerical tables require a shift from the everyday reading practices in which we engage in order for us to make meaning of them.

Photographs are also popular because of their perceived similarity to the objects or phenomena they represent; the subjective *making* of the photograph is usually ignored, and the camera is seen as an objective lens through which the world is faithfully depicted. Angle, light, and background can influence the way objects are represented in photographs and alter our perception of them. For example, the fish represented in Fig. 67.3 seems quite menacing, with its pointed teeth and wide mouth. Once we learn that it actually measures approximately 5 cm (that is, it is almost the same size as it appears on this page) and lives at a depth of 1,400 m in the ocean, we may reconsider our first impression of it.

Photographs might even be used to distort and “forge” the reality they are said to faithfully portray. While the issue has yet to be explored in educational research, a common example is the “touched-up” photographs in fashion magazines that distort not only the image (physical) of the models, but also the image (psychological) of millions of girls who aspire to a pattern of physical beauty that is completely unrealistic and unattainable.

While this example is well known for illustrating how photographs may be manipulated and manipulative, the deeper point is that photographs communicate more than information on a particular topic; most of the times, they (implicitly) communicate a way of living and perceiving the world. One must be *enculturated* into the practices of reading and interpreting photographs or any other type of inscription. Being used to *seeing* inscriptions everywhere is not the same as being *visually* or *inscriptionally literate*, especially in the context of science education, let alone in relation to fashion

photography. The reading work required to interpret a photograph such as the one in Fig. 67.2, for example, is dependent on conventional rules of perspective; competent readers use conventions of perspective to “see” trees on the two-dimensional picture. *Structuring* work of this type is mostly taken for granted when we read an inscription, becoming salient only when we face a breakdown, that is, when we experience difficulty in structuring the graphic representation from a conventional perspective (Roth et al. 2005). Structuring work is necessary for reading all types of inscriptions, but in educational contexts, structuring may be all that students are able to do when faced with unfamiliar inscriptions, especially more abstract ones such as graphs.

The apparent realism in the photographs, therefore, is a result of the readers’ interpretive work, rather than of the similarities between the two-dimensional representation and the actual object in the lived-in world, although these similarities account for the *concreteness* of photographs. To properly perform structuring work, the reader must be accustomed to the conventional rules of perception and representation that allows one to see a third dimension where only two are available. Even more complex, however, is the *translation* work between what can be seen in the photograph and the lived-in world. This type of interpretive work is dependent on cultural aspects and social experiences of the readers; without a cultural and social shared background, reading the inscription becomes that much more difficult (Poizzer-Ardenghi and Roth 2010).

Even though we realize that photographs are not self-evident and not necessarily *realistic*, the power of photographs to have an immediate impact on the reader is nevertheless undeniable. For instance, public and educational campaigns aiming to stop the killing of seals in Canada make use of photographs to send a strong message to their audiences, typically exerting a much stronger impact on the reader than the numbers that describe how many seals are killed every year. Seeing the seals – how small and defenseless they look in relation to their killers, and the instruments and “technique” used to kill them – is a powerful image that shocks many of us. Photographs can touch us deeply and stir our emotions; visual representations, because of their realistic features, appeal to our emotions in different and more powerful ways than numbers and statistics, and they are also often more readily accessible to the general public than mathematical forms of representation (Livingston 1995; Myers 1990).

The Power of Non-numerical Evidence in Educational Research

Visual representations such as photographs may not be the most *scientific* means of representing research data, but they certainly have a strong impact on audiences. For one, they

are much more accessible and easy to read than graphs and statistical tables; photographs communicate a message in a glance: even without captions the reader is always capable of making some meaning out of it through *structuring* work. But most of all, their similarity with the lived-in-world allows us to *experience* phenomena in a way that other inscriptions simply cannot.

Likewise, visual, arts-based and narrative inquiry in educational research provide a *re-presentation* of social phenomena that is in many aspects superior to any type of quantification. The *evidence* in this form of inquiry is provided through representational means whose power resides exactly in their subjective nature and the emotional impact they exert on the reader/audience. Visual arts, dance, theatre and narrative forms of expression, such as poetry, for example, provide the audience with a level of engagement with the “text” that no amount of quantification can simulate. As with photographs, however, one must be enculturated into the practices associated with the different types of inquiry to be able to understand them and even to accept them as legitimate research. These practices differ not only methodologically, but also and most importantly, epistemologically, which makes it crucial for researchers, reviewers, evaluators, readers and consumers of research to be aware of the *audiences* and *purposes* of each type of inquiry.

The issue then becomes one of defining the purpose of our research, and selecting *evidence* appropriate to that particular purpose. In the same way in which numbers and graphs serve a particular purpose in providing *quantifiable* evidence for our research results, by validating them and making our claims more credible from an objectivist perspective, other forms of conducting and presenting research that do not rely on quantification may be a more powerful and strong way to get a message across to the audiences of the research, even if we are not interested in predictions, comparisons and generalizations, but rather in presenting the reader/audience with a more subjective and intimate *experience* of the phenomenon under investigation.

Conclusion

The various ways in which we choose to represent our world and the phenomenon we investigate in our research constitute different forms of *evidence* for our claims. What counts as *evidence* depends, in part, on the epistemological

perspectives underlying our inquiry, but it also depends on the purposes of our research. The power of non-numerical, non-quantifiable evidence resides on the subjective and emotional impact it can exert on the public, and the immediacy with which we are able to engage with these forms of representation. As Roth tells us in this volume (p. X), the strength of the evidence directs the type of representation to use, but it is the purpose of our research that dictates what counts as strong evidence for our research claims.

Note on Contributor

Liliane Pozzer-Ardenghi is an Assistant Professor in the Faculty of Education, University of Manitoba. She completed her MA and PhD at the University of Victoria, where she studied the use of photographs in science textbooks and lectures, and the integration of verbal and nonverbal resources in classroom communication, in the context of science education. Recently, during her postdoctoral research at McGill University, she focused on socio-cultural aspects of classroom communication and interaction, including issues related to agency and identity. She is a co-author, together with Wolff-Michael Roth and Jae Young Han, of *Critical Graphicacy*, published by Springer, and author of *Staging and Performing Scientific Concepts: Lecturing is Thinking with Hands, Eyes, Body, & Signs*.

References

- Bastide F (1990) The iconography of scientific texts: principles of analysis. In: Lynch M, Woolgar S (eds) *Representation in scientific practice*. MIT Press, Cambridge, MA, pp 187–229
- Livingston E (1995) *An anthropology of reading*. Indiana University Press, Bloomington
- Myers G (1990) Every picture tells a story: illustrations in E. O. Wilson's *Sociobiology*. In: Lynch M, Woolgar S (eds) *Representation in scientific practice*. MIT Press, Cambridge, MA, pp 231–265
- Pozzer LL, Roth W-M (2003) Prevalence, function, and structure of photographs in high school biology textbooks. *J Res Sci Teach* 40 (10):1089–1114
- Pozzer-Ardenghi L, Roth W-M (2005) Making sense of photographs. *Sci Educ* 89:219–241
- Pozzer-Ardenghi L, Roth W-M (2010) Toward a social perspective on the work of reading inscriptions in science texts. *Read Psychol* 31 (3):228–253
- Roth W-M, Pozzer-Ardenghi L, Han JY (2005) *Critical graphicacy: understanding visual representation practices in school science*. Springer-Kluwer, Dordrecht

The heART of Educational Inquiry: Deconstructing the Boundaries Between Research, Knowing and Representation

68

Kathleen Nolan

Abstract

Arts-based research seeks to disrupt the hegemony associated with traditional texts by drawing attention to the intimate connections between research and knowing and representation. Non-traditional forms of academic research texts are, however, still viewed with a sceptical eye, partly because they reside in spaces that reject traditional norms for what it means to know and to construct knowledge. In this chapter, I invite the reader to consider how a particular form of arts-based inquiry – namely, kaleidoscopic performative research-writing – can contribute in meaningful ways to the epistemological questions of what we know and how we know it. In doing so, I discuss several research issues associated with an arts-based performative text, including language, linearity, ways of knowing, representation, and legitimation. Each of these issues is discussed in general, as well as in the particular context of a research study with elementary mathematics and science preservice teachers. The chapter strives to illuminate the struggles in bringing about a shift in thinking about academic research and its (re)presentation. This shift requires one to acknowledge that highlighting the intimate connections between research and knowing and representation demands writing *through* (not merely *about*) different ways of knowing – in mathematics, in science, in education and in educational research.

Keywords

Representation • Arts-based • Kaleidoscopic text • Knowing • Constructivist

Introduction

In her rationale for including arts-based representation in qualitative research, Butler-Kisber (2002) states that “non-traditional form helps disrupt the hegemony inherent in traditional texts and evoke emotional responses that bring the reader/viewer closer to the work, permitting otherwise silenced voices to be heard” (p. 231). Disrupting the hegemony associated with traditional texts means questioning the conventions of academic discourse; that is, questioning the legitimacy and privilege associated with traditional, highly standardized texts. Disrupting the hegemony also means

opening spaces for (re)considering new ways of knowing (in) educational research. Non-traditional research-writing is one such space – one which works to highlight and deconstruct the connections between what we know and how we know it, conveying the research process itself as a performance of research as knowing as representation.

In this chapter, I explore questions relating to academic educational research, highlighting a form of arts-based research-writing referred to as kaleidoscopic performative text (Nolan 2007). The purpose of the chapter is to propose and illustrate that kaleidoscopic performative research-writing . . .

In deconstructing the boundaries of scholarly research-writing, I present several issues and discuss them in terms of how they currently limit the performance of research texts. These issues include *language*, *linearity*, *representation*,

K. Nolan (✉)
Faculty of Education, University of Regina, Regina, SK, Canada
e-mail: Kathy.Nolan@uregina.ca

1. highlights the intimate connections between knowing, learning, research, and representation, and
2. provides possibilities for writing *through*, not merely *about*, different ways of knowing.

ways of knowing, and *legitimation* – all discussed in this chapter in general, as well as in the particular context of my recent book entitled *How Should I Know? Preservice teachers' images of knowing (by heart) in mathematics and science* (Nolan 2007). *How Should I Know?* (herein after mainly referred to as *HSIK*) is an arts-based research text in mathematics and science education. My discussion of the five issues in the context of *HSIK* is intended to challenge the academy to think and write against traditional (and hegemonic) academic discourse. Challenging traditional academic discourse is not limited to the scholarly works of qualitative researchers, or even arts-based researchers. On the contrary, educational researchers of all genres have much to gain by entering critical conversations on new ways of knowing (in) educational research.

Table of Contents

- Introduction
- Are We (T)here Yet?
 - ◆ Limited perFORMance
 - ◆ Research and Learning as Constructivist Spaces?
- The heART of Inquiry
- Introducing the Con/text
 - ◆ Language... *colloquial?*
 - ◆ Linearity... *dizzy?*
 - ◆ Representation... *colour?*
 - ◆ Ways of Knowing... *answers?*
 - ◆ Legitimation... *anything goes?*
- Publish or Cherish?
- Another Con/text?
- Shifting (S)ANDS

To close the chapter, I reflect on my personal experience of the (dis)ease associated with publishing kaleidoscopic

kaleidoscope

\Ka*lei"do*scope\, n. [Gr. ? beautiful + ? form + –scope.] An instrument invented by Sir David Brewster, which contains loose fragments of colored glass, etc., and reflecting surfaces so arranged that changes of position exhibit its contents in an endless variety of beautiful colors and symmetrical forms. It has been much employed in arts of design. (Webster's Revised Unabridged Dictionary 1998)

kaleidoscopic text

... loose fragments of text, images, poems, etc. and reflective pieces so arranged that changes of position (lived experience and perspectives) exhibit its contents in an endless variety of beautiful ways of knowing and understandings. It has been much employed in Nolan (2007).

performative text while feeling restricted to/by the predominantly black and white linear paradigm of the publishing wor(l)d.

Are We (T)here Yet?

Several historical narratives have been written that describe the “then, now, and later” (Barone 2006) of arts-based educational research. Generally, these historical narratives trace back to the early 1990s when Eisner and others sought to “disrupt the prevailing monolithic mindset, successfully challenging the taken-for-granted notion that scientific method provided the only useful avenue for enhancing educational policy and practice” (Barone 2006, p. 4). Almost 15 years ago Richardson (1995) expressed dismay at “how scientific norms from the seventeenth century are still shaping how we are supposed to acquire and retain knowledge, even when our knowledge is from qualitative inquiry” (p. 190). But how much has changed in these 15 years? Are scientific practices still creating and patrolling boundaries for knowledge production, thereby working to undermine many research endeavours that seek to disrupt and deconstruct the traditional forms of academic knowledge?

Without a doubt, many examples of arts-based educational research – the theory, practice, and promise of it – now adorn the pages of peer-reviewed academic journals, conference proceedings, doctoral dissertations, and even educational research methodology books (see, for example, Bagley and Cancienne 2002; Diamond and Mullen 1999; Roth 2005; Sinner et al. 2006; Springgay et al. 2008). And so it may be true that “today’s traditional methodologists in the academy find it more difficult to dismiss those of us who look to the arts for both a process of researching educational phenomena and a means for disclosing what we find” (Barone 2006, p. 4). But

does it mean that arts-based educational research has “made it” – that there is no longer a need for defensive posturing against traditional methodologists and for making the case that arts-based research can “help us understand more imaginatively and more emotionally problems and practices that warrant attention in our schools” (Eisner 2006, p. 10)?

I am not so sure.

I am not so sure we are (t)here yet.

If we are (t)here,

wouldn't the current of
be flowing into

different ways of knowing (in)
educational research
different ways of knowing (in)
school classrooms?

wouldn't the boundaries
be blurred between
and *research on*

teaching and learning in school
classrooms
teaching and learning in school
classrooms?

While some propose that “the bold imaginings [of arts-based educational research] have been, over time, realised, and maybe even surpassed” (Barone 2006, p. 7), I would *not* agree; at least not until (research) theory is visible in (educational) practice. As it stands, non-traditional forms of academic research texts are still viewed with a sceptical eye, partly because they reside in spaces that reject traditional norms for what it means to construct knowledge. Traditional idea(l)s for knowledge construction are highly standardized and generally include an expectation of a linear text which (re)presents questions, data, and answers in a simple and unambiguous manner.

A familiar construction of knowledge?

Abstract
Acknowledgements
Table of Contents
1. Introduction and Significance of Study
2. A Review of the Literature
3. The Research Process
4. Discussion of Data
5. Conclusions and Recommendations
References
Appendices

Arts-based representation formats, on the other hand, seek to disrupt and deconstruct these traditional idea(l)s along with the perceptions of legitimacy associated with such neat and tidy packages. Barone and Eisner (1997) describe several features of arts-based research, such as the presence of ambiguity, the use of expressive language, and the presence of aesthetic form – the use of which seek to intermingle and blur the boundaries between the research process, representation, and knowing. The fact that these (and other similar) features of arts-based research are still only minimally visible in published research texts begs the question of whether, as academics, we are truly ready to

embrace arts-based qualitative research when required to actually live out these features in the text. In other words, are we still more inclined to write *about* the promises of arts-based features rather than *through* them? Is the experience of arts-based research still a limited performance, one that cannot escape its positivistic ties?

Limited PERFORMANCE

Denzin (1998) identifies two phases involved in the *art of interpretation* in qualitative inquiry: (1) field to text, and then, (2) text to reader. Clandinin and Connelly (1998) express a similar perspective when they make a clear distinction between field texts and research texts, asserting that a *field* text is not a *research* text because it is not ‘finished’ until researchers complete the task of discovering and constructing meaning in those texts (p. 170).

Such a division between field and research texts is problematic; it portrays a neat and tidy linear process that, if executed properly, culminates in a final research text that will have erased all signs of the process itself. I maintain, however, that the research process (field to text to reader) is a performance that should be re-presented in/through the research text. In practice, the movement from **field** to **text** to **reader** has blurred boundaries and is not actually *a* movement at all but a space of doubling (Aoki 2000; Nolan 2007). In a doubling space, one does not feel compelled to distinguish *either* field *or* text but, instead, is willing to reside in the ambiguous space of *both* field *and* text. Richardson (1998) also draws attention to this issue when she describes writing as a way of knowing, and “not just a mopping-up activity at the end of a research project” (p. 345). To better convey how research-writing can be **both** field **and** text, it is worth making constructivist connections between the processes of research and acts of learning.

Research and Learning as Constructivist Spaces (?)

Like learning, research can be viewed traditionally, as a process of *transmission* of knowledge, or interactively, as a *construction* of knowledge (on the part of both the researcher/author and the reader). Brew (1999) criticizes a transmission approach to learning because it perpetuates the view that the learner merely acquires a body of objective knowledge that is assumed to exist externally to the learner. The traditional transmission model portrays learning and knowing as finished products *acquired* by the learner, not as processes; the model does not focus on the teacher as learner/knower or on students as active participants in the learning/knowing construction process. I claim that this

transmission model of learning is analogous to the dominant view of research.

Focusing on the connections between research, teaching, and learning highlight how traditional approaches to teaching through transmission are not so different from dominant empiricist assumptions regarding traditional research methodologies and representation. In traditional research-writing, an effort is made during the transition from *field to text to reader* to eliminate all the fits and starts, trials and tribulations, thoughts and re-thoughts – in other words, to eliminate the researcher’s own learning process. According to Brew (1999), it is still widely assumed that “research is the creation or discovery of a body of knowledge which is detached or separated from the people who developed it” (p. 292).

In addition, constructivist connections need not be limited to how the researcher constructs his/her own learning; it is important not to ignore another learner in this picture – that is, the *reader* of the research text. In other words:

IF a constructivist view of a learner requires the teacher to view teaching as contextual, learner-centred, negotiated, discursive, and reflexive, THEN a constructivist view of the *reader as learner* requires the researcher to view researching as contextual, learner-centred, negotiated, discursive, and reflexive.

Brew (1999) expresses the relationship between research and learning in a way that aptly corresponds to this constructivist relationship by pointing out that “learning and research are both conceptualized as processes of constructing knowledge” and researchers should “recognize the ways in which their activities parallel those of students” (p. 298). In other words, if in fact constructivism takes the emphasis off the teacher and the transmission of knowledge and places it on the learner, then a constructivist approach to academic research would take the focus off the researcher and the transmission of knowledge and place it instead on the learner, or reader, of the research texts. In other words, a constructivist approach to academic research “works against the tendency [for the researcher] to become the locus of authority” (Lather 1991, p. 91).

Taking into consideration the learning acts of both the researcher and the reader fly in the face of scientific models that call for objectivity in what counts as knowledge. Kincheloe (1997) proposes that “when a particular representation is viewed as objectively true, it is seen as such because its mechanics of construction have become familiar to a point that they are rendered invisible” (p. 68). If/when these mechanics of construction are rendered visible through deconstruction, we might actually find that a traditional text lacks an ability to provoke the reader into careful and critical thought through a creative (re)presentation of ideas. We might find that non-traditional, arts-based texts better reflect the knowing and learning processes.

The heART of Inquiry

Research, teaching, and learning are messy and complex processes; yet when one glances through academic books and journals, the remnants of messiness are seldom visible. If the *processes* are messy and complex, why are the *products* of research almost always in the form of a neat and tidy (often linear) text? Perhaps Code (1991) best responds to this query by claiming that “[c]lean, uncluttered analyses are valued more highly than rich, multifaceted, but messy and ambiguous, narratives” (p. 169).

Another lens through which to view the nature of kaleidoscopic research-writing might be found in Richardson’s (1995) description of “combination genres” which she portrays as fictional stories, field notes, analysis, self-reflexions, etc. – all coexisting separately throughout the text but working together to enhance the meaning and depth of the text as a whole (p. 196).

As stated in the introduction to this chapter, I seek to illustrate how kaleidoscopic performative research-writing can highlight the connections between knowing, learning, research, and representation. Contrasting knowing and learning from constructivist perspectives with knowing and learning in transmission models (as done in the previous section) helps set the stage for a discussion of kaleidoscopic performative research-writing. Because this form of arts-based inquiry embraces the messy and in-between spaces of knowing, learning, research, and representation, it seeks to disrupt traditional norms for what it means to construct academic research knowledge. Butler-Kisber (2002) indicates that the heart of arts-based research is in the belief that form mediates understanding and that “different forms can qualitatively change how we understand phenomena” (p. 231). Polkinghorne (1997) supports this by suggesting that “researchers need to use a format that can communicate the depth, complexity, and contextuality of their knowledge generation” (p. 13).

This discourse on the form of performative and constructivist research is closely related to how Barone and Eisner (1997) define arts-based research. According to these authors, arts-based research “is defined by the presence of aesthetic qualities or design elements that infuse the inquiry and its writing” (p. 73). They list and describe seven such design elements (pp. 73–83):

- the creation of a virtual reality
- the presence of ambiguity
- the use of expressive language
- the use of contextualized and vernacular language
- the promotion of empathetic understanding
- the use of the personal signature of the author
- the presence of aesthetic form.

Using some/all of these features, a performative text can respond to meaningful epistemological questions by highlighting connections between *what* we know and *how* we know it. Arts-based, or performative, research highlights how the message is not only IN the medium, the message IS the medium.

Introducing the Con/Text

How Should I Know? emerges from a critical research study that challenges the hegemony of official narratives for what counts as knowledge and what it means to know (in) mathematics and science. The book is written as a parody of a physical science textbook on the topic of light, presenting a kaleidoscope of elementary preservice teachers' narratives of knowing (in) mathematics and science. The (re)presentation format of the book emphasizes the reflexive and polyphonic nature of the research, illustrated through a rich, multi-voiced, multi-layered text – which I refer to as a “*textextext*” (Nolan 2007, p. 46). The special features (or design elements) of the *textextext* were chosen to reflect the multi-faceted nature of the research study, as well as the ambiguities and tensions experienced by the research participants. In addition, the *textextext* helped me, as a researcher and learner, break free of my own tightly scripted and positivistic learning experiences by researching-writing creative departures in the teaching and learning of mathematics and science. The layers in this *textextext* include the voiced re-presentation *text* (author, participants, responsive colleagues, and scholars in the field) with/in the performance *text* (poetry, prose, comedy, journal), with/in the metaphorical *text* (properties of light, diagrams, photos, vocabulary).

In exploring how the research participants experienced learning in mathematics and science, *HSIK* uses kaleidoscopic text to imag(in)e other possibilities for knowing (in) these subject areas. My desire was to not only write the research text *about* different ways of learning and knowing (in) mathematics and science (this is attempted often in educational research) but to actually write the research text *through* different ways of learning and knowing. The meaning behind the prepositional choice of *through* over *about* highlights the intimate connections between research, learning, and knowledge, proposing a paradigm shift for understanding and realizing the possibilities of a performative text.

Through personal experience narratives and kaleidoscopic performative text, the subtext of the book directs attention to a key question: If we advocate the importance of teaching and learning different ways of knowing (*mathematics and science*) and we believe that we must connect this

with *research on* teaching and learning different ways of knowing (*mathematics and science*) then how can we (re) imagine research AS knowing AS representation? In other words, is it possible for educational research *on* teaching and learning to reflect the messiness and ambiguity *in* teaching and learning? It is my contention that research on the theory of teaching and learning and the practice of teaching and learning still struggle to inform each other in meaningful ways.

I can (hypothetically) agree with Tierney (1998) when he writes: “To seek new epistemological and methodological avenues demands that we chart new paths rather than constantly return to well-worn roads and point out that they will not take us where we want to go” (p. 68). However, as I attempt to chart new paths in my own research-writing, I am often directed down the well-worn roads by those who prefer that I traverse them instead. In my desire for new paths, several recurring issues have become a major focus in (the defence of) my performative research text. These issues, and how I pondered and responded to them with respect to *HSIK*, echo Barone and Eisner’s (1997; 2006) delineated features of arts-based research. As mentioned previously, the issues can be broadly labelled *language*, *linearity*, *representation*, *ways of knowing*, and *legitimation*. In the next few sections of this chapter, the problematic nature of each of these issues, as they are lived out in *HSIK*, are described in terms of the many conversations with, and responses from, colleagues, publishers, and other readers.

Language . . . colloquial?

col-lo-qui-al (k -l kw - l)

adj.

1. Characteristic of or appropriate to the spoken language or to writing that seeks the effect of speech; informal.
2. Relating to conversation; conversational.

(*The American Heritage® Dictionary of the English Language*, 2000)

When research is presented using language that is comprehensible and personal, comments from readers range from exclamations of it being wonderfully accessible for all readers to concerned expressions that it is “too colloquial” and just “not academic enough”. Since the qualitative research process portrayed in *HSIK* involved having conversations with participants that were personal, contextualized, informal, and accessible, I felt that the representation of the conversations needed to reflect this. Clandinin and Connelly (1998) observe how life and method are inextricably intertwined; that ways of making sense are always personal and based in experience. Seldom does a qualitative researcher deny this, yet it is also seldom that the language and (re)presentation of the text reflects this.

The (perceived) requirement of forcing colloquial language through an academic filter has the effect of erasing important aspects of conversation and voice. Butler-Kisber (2002) suggests: “Through accessible language, and a product that promotes empathy and vicarious participation, the potential for positive change in education becomes possible” (p. 229).

the use of contextualized and vernacular language

“Less constrictive of meaning is language that is not as specialized... ordinary, everyday speech in an arts-based research text may serve to attract a different readership than would ordinarily engage in the reading of educational research texts.”

(Barone and Eisner 2006, p. 97)

It should be noted that my pitch for kaleidoscopic research-writing is not a project to replace one form of a (hegemonic) language paradigm with another. It is, however, a project that asks the question of “what might come of encouraging a plurality of discourses and forms and levels of writing in a way that refuses the binary between so-called ‘plain speaking’ and complex writing?” (Lather 1996, p. 528)

In *HSIK*, I re-present conversation excerpts through pages of research dialogue, through newsletter formats, and through poetic adaptations of participant voices. In addition, my ponderings and interpretations of the data are both reflexive and personal in that I connect my own experiences of teaching/learning mathematics and science to those voiced by my participants. Figure 68.1 reproduces one page from *HSIK* as an example of how this issue of language has been lived out in the text.

Linearity... dizzy?

A comment from one of my colleagues about her experience of reading my research text (in its kaleidoscopic form) made me aware of how uncomfortable learning can be: “I’m twisting in circles, dizzy, in fact! This is all very postmodern but how do you connect it with your question...?!” (Nolan 2007, p. 65) Her comment gave me cause to ponder the noticeable contradictions in openly claiming to support arts-based approaches to research representation while, simultaneously, demanding a focused and linear text that provides answers. I interpreted her comments to mean that she wanted me to address my questions and provide possible answers through a more comfortable text – one that did not challenge her to engage with the text at so many different levels that she might get lost. In a similar quest, Lather (1997) expresses her aim to work against a “comfort text”, requiring instead that the reader “come to know through discontinuous bits and multiples of the women’s stories”

(p. 296). She admits, however, that such a method of “textual dispersal” became a source of confusion and even frustration for many readers.

Readers and scholars generally experience comfort in a linear, tidy narrative. Unfortunately, such a comfort text does not often challenge us to make our own connections within multiple layers of meaning, getting temporarily lost in thought and understanding along the journey. In *HSIK*, however, the topic of research itself is messy, ambiguous and riddled with complexity. The stories of the participants’ experiences of learning mathematics and science convey much discomfort, with back and forth movements between anger, frustration, hope, and uncertainty; the stories have jagged, unfinished edges that cannot be smoothed over; the stories consist of dynamic designs and relationships such that with each turn of the conversation new designs and relationships emerge. Kaleidoscopic performative text persuades the reader to experience *the kaleidoscope that is learning*, in all its complexity and uncertainty.

the presence of aesthetic form

“... aesthetic design elements work toward a powerful transmutation of feelings, thoughts, and images into an aesthetic form... to see educational phenomena in new ways.”

(Barone and Eisner 2006, p. 96)

It is worth drawing parallels between this preceding paragraph and the teaching and learning of mathematics and science. It is generally true that mathematics and science students (of all levels) want rules and recipes to make their learning proceed smoothly and easily. Schools train students to expect this of their teachers since the dominant discourse of “the good teacher” (Moore 2004) includes qualities of organization, control, expert-like knowledge, and a proclivity for clear and complete explanations. Gordon (2006) asserts that such teacher characteristics, when lived out in classrooms, do not actually encourage (or result in) student learning. He states that “in order to gain genuine knowledge about something, it is essential to undergo a rigorous investigation, which involves articulating, doubting, evaluating, and re-examining one’s beliefs” (p. 20) – processes which embrace uncertainty and ambiguity, and which are generally lacking in traditional, transmission approaches to teaching.

This quest for clarity and simplicity in teaching and learning in mathematics and science classrooms can be compared to similar expectations for research on teaching and learning. Not comfortable with confusion and ambiguity, researchers often feel obliged to perform research and writing such that complex problems are reduced to simple solutions. But such simplistic solutions are of little value in the long term; mathematics and science education remains stymied by the same problems that persistently plague the field and the same simplistic solutions leading

Fig. 68.2 Nolan 2007, p. 145

To help facilitate a reflection on the active role of the knower in the acts of knowing, I conversed with my participants about their experiences of knowledge 'absorption'. It became clear to me, early in my conversations, that most of my participants were

fully aware of their status as 'received knowers'. (We did not use this terminology, of course, but we spoke at great length about our experiences of **copy, col-**

our, recall, as described in the previous chapter.) As illustrated in the pilot study quotation above, the preservice teacher resents that her participation in 'knowing' was limited to receiving and memorizing. I believe that an awareness of the nature of these kinds of experiences is why several of these women preservice teachers volunteered to be a part of my study in the first place. From the early onset of my research conversations, it was made clear to me that these women were mindful of, and some even infuriated by, the passive role they played in their mathematics and science 'learning' experiences.

I like to be in control of the things that I learn. I want them to be *my* things to learn and if somebody would have given me just an inch in science to learn something for myself or discover something for myself, I think it would have meant something to me. It's not that I didn't have the interest; I'd go with the interest. I thought Biology was really neat and I thought that it had potential. But when I got there, someone was just giving me boring information. You know? There's no reason why it couldn't have been fun for me. Like, I *loved* the animals we had in that room—we had fish and we had a bird... I loved that stuff about it— the plants. But they didn't give us a chance. Like, you could be the person who *fed* the fish, if you were inclined, but...They were just a backdrop for somebody to give you these notes. *I never interacted with those fish or that bird for one second.* They were just there...probably because someone said a biology class should have this and this— and one of the things was a fish.

(Ursula, October 1999)



I certainly do not believe that any one of my participants *chose* to have such meaningless experiences of school mathematics and science learning. Even as self-acknowledged received knowers, however, they were seldom able to envision how things might be different. Without direct constructivist experiences or experi-

text requires the reader to step out of the comfort zone of black and white text and into the realm of colour text, images, and pages. The colourful kaleidoscopic pieces are dispersed throughout the text in unpredictable and nonlinear ways to jolt the reader into imag(in)ing other ways of knowing (in) mathematics and science. While colour is present in the text partly as an aesthetic and interruptive device, it is not only this. The rationale for the use of colour in a kaleidoscopic research text has deeper meaning than an aesthetic break from black and white wor(l)d, and yet responses from publishers have made me acutely aware that the deeper meaning is mostly lost.

Colour is a light metaphor for non-dichotomous thinking, embracing the potential for residing in the slash spaces of black / white, right / wrong (answers), knowing / not knowing. A constructivist research text enables and encourages the reader to move back and forth between knowing / not knowing – the to-and-fro movement in the slash space that is learning. The to-and-fro movement in the slash space of the black / white metaphor, between total absorption and total reflection of light, is the experience of colour. The light metaphor of colour focuses attention on the spaces between black and white as spaces of partiality,

Fig. 68.3 Nolan 2007, p. 129



where there is ambiguity and possibility. Thus, the metaphors of kaleidoscope and colour are full of possibility for academic research since they highlight the importance of acknowledging different ways of knowing. As the reader turns things over in her/his mind, the colourful bits and pieces slide about and (re)arrange themselves into new imaginings, for both the topic of the research and for the research methodologies. Thus far, however, my vision of colourful kaleidoscopic academic text has predominantly encountered the desires of monochromatic researchers and publishers in defense of textual traditions and the black and white linear paradigm of the publishing wor(l)d.

Ways of knowing . . . answers?

Many important questions in education are deeply personal, unavoidably political, and frequently without resolution. A research text can (and, I advocate, should) reflect the ambiguity inherent in such questions. It is clear from the traditional structures for writing – whether in the form of theses, dissertations, journal articles, or conference presentations – that a final chapter/section presenting conclusions and recommendations (in other words, 'answers') is expected. Improving mathematics and science education is a complex and problematic issue and, despite solutions being

proposed throughout educational research literature for many years, little has been ‘solved’ in practice. Experiences of learning mathematics and science still leave many learners with the impression that to know in mathematics and science means to know ‘answers’.

To know... is *poiesis*,
a world in process,
a text in the making.

(Nolan 2007, p. 216)

To legitimize diverse ways of knowing – that we do indeed have knowledge without answers – I could not maintain the integrity of the research text by closing with my version of the ‘answers’ to the problems facing mathematics and science education. When readers of initial drafts of the research text expressed a need for purposeful closure in the form of conclusions and recommendations, I began to ponder how it might be possible to divert attention away from such a familiar expectation for *closure* and, instead, create spaces for *openings*. In an attempt to draw readers out of this expectation and, at the same time, to draw attention to their perceived need for it, I constructed (colluded?) a final chapter in *HSIK* entitled *Conc(ol)lusions* (Nolan 2007, pp. 207–223). In that final chapter, I review and reiterate participant voices as they grapple with some of the critical questions in mathematics and science education – the kinds of questions that do not lead to straightforward solutions and conclusions.

Writing *through* knowledge-without-answers speaks louder than writing *about* knowledge-without-answers. Expecting a research text to provide answers perpetuates several misleading assumptions, the first of which is the assumption that there *are* simple answers to complex problems. The expectation of simple answers ignores the complexity and ambiguity in the to-and-fro interpretive movement between text and reader (between knowing, research, and representation) in the creation of meaning. The expectation of simple answers ignores how multiple understandings provide greater opportunity for change. Barone and Eisner (2006) propose that a promising feature of arts-based research is “its ability to promote new questions” and, in fact, to raise “more questions than it answers” (p. 102).

A second assumption perpetuated in the expectation of definitive answers is that the researcher *knows* the answers and, simultaneously, the reader *does not*. Hence, the reader needs to be *told* the answers. Performative research-writing does not attempt to transmit one single meaning; rather, in the text-reader interaction, it seeks to create openings for multiple meaning constructions and for noticing the *unsaid* within/beyond the *said*. Unfortunately, many research texts erase the personal agency of the reader by assuming that the researcher’s construction of meaning is most meaningful for all. A performative research text is “a text whose

significance will not be exhausted by the meaning attributed to it by any one person” and is one that “elicits differing capacities for understanding, hailing an audience with ears to hear” (Lather 1996, pp. 539–540).

the presence of ambiguity

“Arts-based educational research is not aimed toward a quest for certainty... Rather than closing off discussion about the presuppositions embodied within a research project, it moves to broaden and deepen ongoing conversation.”

(Barone and Eisner 2006, p. 96)

From a constructivist perspective, “the learning environment should represent the natural complexity of the real world and avoid oversimplification” (Applefield et al. 2001, p. 49). The real world of teaching and learning mathematics and science, along with the real world of understanding and representing *the experiences of* teaching and learning mathematics and science, is complex and replete with ambiguities. In teaching, however, we are often too quick “to display the artfulness of our finished weaves/texts” (Davis 2008, p. 84) instead of revealing the snags and flaws of the journey of coming to know. Similarly in research, presenting only the finished weave/text serves to label the research *process* as less important than the *product*. The real world of educational research, as in the real world of teaching and learning, demands a process of grappling with (and sometimes just not finding answers to) complex and messy questions. Figure 68.4 is an example how this issue of (non)answers has been lived out in *HSIK*.

Legitimation... anything goes?

For decades, qualitative researchers have searched for, and defended, new criteria – such as “referential adequacy” (Eisner 2006), “structural corroboration” (Eisner 2006), “crystallization” (Richardson 1998), “illuminating effect” (Barone and Eisner 2006), “incisiveness” (Barone and Eisner 2006), and “generativity” (Barone and Eisner 2006), just to name a few – for legitimizing qualitative research, and (more recently) arts-based research. *HSIK* is a text that does not attempt to legitimize itself through the traditional criteria of reliability, validity, and generalizability (Denzin and Lincoln 1998, 2000), and thus it can be uncomfortable and unfamiliar for many readers. When faced with the loss of comfort and familiarity, one of my colleagues characterized the text as “an escape to relativism”. She declared that such a text was evidence of condoning an “anything goes” approach to academic research in this new postmodern world. Such a comment, coming from a self-proclaimed “post” researcher, calls to mind an interesting optical metaphor. Sporting glasses with a positivist lens in postmodern frames begs the query: You *look* good but are you *seeing* differently?

Fig. 68.4 Nolan 2007, p. 205**CONC(OL)LUSIONS***Part I: A Kaleidoscopic (Re)View*

*So if I explore a certain
experience of incompleteness,
of deep-down craving,*

**oh, I can tell you exactly what I *don't* want
but to tell you what I *want*...**

*I'm not suggesting it's the only
matrix for living your life. It's
simply the one I know. (Lee, 1995,
p. 38)*

**We would mostly *just sit*...
and not draw on the desks**

**It was something that you study and you try to get the right *answers*
I'd better just acknowledge the question,**

It always *feels* like a race to an *answer*

and let it breathe. (Lee, 1995, p. 44)

**If you get *lost in the middle*...
it *is* a problem**

How would you *measure* it?

**They're *scared*
I'm *terrified***

Insist on the importance of faithful, yet critical
and necessarily partial, stories of women's ex-
periences and material circumstances for pro-
ducing critical understandings of how patriarchal

**The only real thing that the girls in the class could get
from chemistry would be the chemical equation for diamond**

Teachers would say

oppression is legitimated by hegemonic epis-
temic values. (Code, 1995, p. 181)

It strikes me that something is missing in these efforts to define criteria for judging arts-based educational research. Perhaps there is one quality that somehow looks after all the rest. I think that one quality is the response to the question: Is there a dialectic relationship between form and content? In other words, is there a deep (and I might even say necessary) connection between the *knowing* of the research topic and the form of the research *representation*, write/write/read the text in any other way and still have the same illuminating, generative, incisive, and crystallizing effect?

Education in a world so postmodern in nature demands that we clean our lens, if not examine the basis of its appropriateness. What, then, is appropriate? Perhaps the most appropriate lens is that which affords us the richest, most eclectic vision imbued with possibilities and meaning, signifying not only the denseness of context and diversity but also questions, problems, and perhaps even solutions that speak from these very contexts (Ninnes and Metha 2000, p. 206).

Instead of dismissing a text as evidence of “anything goes” research, why not embrace the rich, eclectic possibilities of a text that has “something in it for everyone” (Nolan 2005, p. 119)? The notion of *something in it for everyone* highlights the possibilities for a narrative research text to resonate in different ways with different reader experiences. Butler-Kisber (2002) insists that “in-depth, context-specific work... allows others to take away from the particular what resonates with their experiences and use these understandings to enhance educational practices in other settings” (p. 231). The concept of resonance can also be viewed as central to the relationship between knowledge construction and the writing/reading of texts – how (and when) resonance and learning will occur for a reader who engages the lived experience narratives of a text cannot possibly be predetermined by the author of that text.

In questioning and deconstructing traditional forms of research and representation, what creative possibilities exist for highlighting connections between *what* we know and *how* we know it? In creating research spaces for the presence of arts-based qualities such as ambiguity, aesthetic form and expressive language, the world of published academic research could speak to, and for, different people. Such spaces could challenge the disconnections between the space to *publish* and the space to *cherish* research text.

Publish or Cherish?

In deconstructing the boundaries of language, linearity, representation, ways of knowing, and legitimation in scholarly writing, I have attempted to highlight the problematic nature of academic discourse in its rigid compliance with certain norms and traditions for what counts as research and as knowledge. In order to shift thinking on academic research and its (re)presentation, one must be willing to embrace the belief that a different textual performance is more than an unfinished field journal filled with ‘raw’ data and musings of the author. However, McWilliam (1997) cautions that “the issue of whether to embark on a very different sort of textual performance... can be a tricky and demanding one” (p. 223). The discussion in this chapter on kaleidoscopic performative research-writing acknowledges that the choice to create a different textual performance is, indeed, a tricky and demanding one, given the proverbial academic expression of “publish or perish” (Benjaminson 1992; Moxley 1992). As an academic striving for acceptance and publications, it is tempting to simply learn and comply with the traditional rules and structures for scholarly work rather than embark on a unique journey. Choosing the space to *publish* one’s research is, after all, viewed as more beneficial to an academic career than the space to merely *cherish* one’s (unpublished) research.

Publish

\Pub"lish\, v. t. [imp. & p. p. *Published*; p. pr. & vb. n. *Publishing*.] [F. publier, L. publicare, publicatum. See **Public**, and **-ish**.]

1. To **make public**; to make known to mankind, or to people in general; to divulge, as a private transaction; to promulgate or proclaim, as a law or an edict. (Webster's Dictionary 1998, author's emphasis)

Cherish is the word I use to describe
All the feeling that I have hiding here for you inside
You don't know how many times I've wished that...

Perish is the word that more than applies
To the hope in my heart each time I realize
That I am not gonna be the one to...

-*Cherish*, by Nina Simone

Entry: cherish

Function: verb

Definition: care

Synonyms:

admire, adore, appreciate, **clasp**, cling to, coddle, comfort, **defend**, dote on, embrace, **enshrine**, guard, hold dear, hug, idolize, **imagine**, like, love, nourish, nurture, pet, **preserve**, prize, revere, safeguard, shelter, treasure, value, venerate, ... (Roget's Interactive Thesaurus 2003, author's emphasis)

At this point, it is worth reminding the reader that the significance of this chapter extends beyond its implications for educational research methodologies and representation. Its significance also rests in its ability to draw parallels between the construction of academic research knowledge and the construction of knowledge in, for example, mathematics and science education. It seeks to disrupt and deconstruct what it means to know and the complex nature of knowing-in-process. Acknowledging that knowledge is always and only in process means remaining open to the

possibilities of performative research-writing – writing that portrays researching, learning and knowing as contextual, negotiated, discursive, and reflexive.

Shifting (S)ANDS

In this chapter, I have invited the reader to consider how a particular form of arts-based inquiry – namely, kaleidoscopic performative research-writing – can contribute in

meaningful ways to epistemological questions by highlighting connections between *what* we know and *how* we know it. In doing so, I have drawn attention to the intimate connections between research *and* knowing *and* representation, illustrating that such a form of inquiry uses multiple lenses and brushes to imagine rich possibilities for educational research. As a research text, *HSIK* strives to write *through* (not merely *about*) different ways of knowing – in mathematics, in science, in education and in educational research. Writing through different ways of knowing seeks to deconstruct the dominance of purely textual, linear research-writing, as well as open spaces for crafting “research that reveals to us what we have learned not to see” (Eisner 2006, p. 17).

But what of the future for such a form of research-writing when many of us have learned so well *not* to see things differently? On the future of arts-based educational research, Eisner (2006) states:

Clearly, arts-based research is an expression of the need for diversity and a tendency to push towards de-standardization of method. What is not clear is how much de-standardization those in the research community will tolerate and, at the same time, accept as being legitimate. (p. 16)

Indeed, there is a call for researchers to diversify methodological approaches and think critically about how/when to utilize the multiple lenses and brushes we have within our reach. The educational research community is being asked to embrace the possibilities of arts-based research as a form of inquiry, not merely as a form of representation (Finley 2003), and to demonstrate a “commitment to creative ways of knowing and researching as a journey of transformation” (Sinner et al. 2006, p. 1237). Personally, as I have strived to explore these possibilities and live out this commitment in my own research-writing, I have experienced quite diverse, often disheartening, feedback.

Often, I had to (chose to?) forgo many features of the performative text that, upon peer review, were not viewed as ‘publishable’ in the particular journal or book. In fact, comments such as “Is this necessary?” continue to trouble me. My response is generally to say “of course not”. (Few things are, after all, *necessary*.) To one editor, however, I replied:

I find ‘necessary’ a curious word in this context because those who use it seldom question the necessity of tradition (the standard, linear text that sets the status quo in academic research text). For this very reason, when I write about ‘other ways of knowing’ I think such interruptions and in(ter)ventions into a person’s reading are, in fact, *quite* necessary. It’s part of the message of the text.

When a researcher constructs and performs text in “alternative” ways – that is, outside of the box for what is traditional (and perhaps hegemonic) in that field – considerable energy can be expended defending and doubting oneself. Is it (legitimate) knowledge? Is it (academic enough) research? Is it

(good enough) art? Perhaps this defensive self-questioning of writing practices should take an offensive turn and ask ‘*why not*’? What legitimacy is associated with the academy holding on to such tradition in academic discourse?

on art

is this art

good?

what

is this art

good for?

for

divergence interruption pause confirmation resonance impetus deconstruction knowing

not for

convergence intimidation praise conformation reassurance impotence reproduction purchase

does art

for arts’ sake

have greater expectations attached

than art

for

divergence interruption pause confirmation resonance impetus deconstruction knowing

in research-writing?

should this be published?

can I use the keyword

artist? or

performer? or

researcher? or

(to temper expectations)

alternative? interesting? clever? unusual? experimental? messy?

glib? playful? *unclassifiable*?

At times, I walk a fine line between strongly advocating for my chosen visual and interruptive features of the research-writing text and a contradictory reaction that has me backing away from such an arts-based text because someone has indicated that I’m not good enough at it. Davidson (2004) writes about similar experiences and contradictions in her own work, admitting that she became “mentally handicapped by a sub-conscious belief that the written text was more important to demonstrating my intellectual merits than the graphic illustration” (p. 51).

I am *not* making a case for an offensive posturing,

that seeks to block out the dissenting voices of readers of my research-writing.

With multiple lenses and brushes, educational research need not desire to speak to everyone

at the same time, in the same way.

I am *not* making a case for replacing the scientific paradigm

with another equally oppressive or hegemonic one. Like Barone (2007),

I would rather espouse “a kind of research ecumenism that encourages continued exploration into and with an array of educational research approaches” (p. 468).

And I am definitely *not* making a case for the future of arts-based educational research.

This has been done, and done well, by many others.

I *am*, however, making a case for educational research *on* teaching and learning

to search diligently for creative ways to interact *with* teaching and learning,

not only in *what* is done/said/known but in *how* it is done/said/known.

Conversations on/about research are still overly preoccupied with the field-to-text-to-reader movement – where research is conducted, data is analyzed to construct and extract knowledge, and then this knowledge is re-presented. Such a movement portrays the *form* of representation as an arbitrary choice made by the writer/author, having little to do with the knowledge being constructed and the reader's experience of the research text. How do we get beyond seeing research *and* knowing *and* representation as separate and distinct processes?

In closing, I do not offer answers, but one key question worth asking about the shifting (s)ands of research and knowing and representation: Is there a deep (even necessary) connection between the *knowing* of the research topic and the form of the research *representation*, so much so that it seems unthinkable to say/write/read the text in any other way and still realize the same illuminating, generative, incisive, and crystallizing effect? The back and forth movement in the in/between spaces of research and knowing and representation is a constantly shifting, sandy landscape, where the goal is not to seek solid grounding in universal, unchanging ways. Instead, it is in understanding that the texture and movement of those fine particles of sand is where one finds the heART of research and knowing and representation.

Acknowledgements ... for permission granted by Open University Press for reprinting portions of this chapter which were previously published in: Nolan, K. (2005). Publish or cherish? Performing a dissertation in/between research spaces. In R. Barnett (Ed.), *Reshaping Universities: New Relationships between Research, Scholarship and Teaching* (pp. 119–135). Maidenhead: McGraw-Hill/Open University Press.

... for permission granted by Sense Publishers for reprinting portions of this chapter which were previously published in: Nolan, K. T. (2007). *How should I know? Preservice teachers' images of knowing (by heart) in mathematics and science*. Rotterdam: Sense Publishers.

Note on Contributor

Kathleen Nolan is an Associate Professor in the Faculty of Education at the University of Regina, where she teaches undergraduate and graduate courses in mathematics curriculum and in qualitative research. Her research interests include poststructural readings of mathematics education and narrative and self-study research methodologies. Her publications include the books: *How Should I Know? Preservice teachers' images of knowing (by heart) in mathematics and science* (2007), and *Opening the Research Text: Critical insights and in(ter)ventions into mathematics education* (co-editor, 2007), and various articles in the *Journal of Mathematics Teacher Education* and the *Journal of Teaching and Learning*.

References

- American Heritage Dictionary of the English Language, 4th Ed. (2000). Electronic version published by Houghton Mifflin Company
- Aoki T (2000) Locating living pedagogy in teacher "research": five metonymic moments. Paper presented at the international conference on teacher research, Baton Rouge, LA, April 2000
- Applefield JM, Huber R, Moallem M (2001) Constructivism in theory and practice: toward a better understanding. *High School J* 84(2):35–53
- Bagley C, Cancienne MB (eds) (2002) *Dancing the data*. Peter Lang, New York
- Barone T (2006) Arts-based educational research then, now, and later. *Stud Art Educ* 48(1):4–8
- Barone T (2007) A return to the gold standard? Questioning the future of narrative construction as educational research. *Qual Inq* 13(4):454–470
- Barone T, Eisner E (1997) Arts-based educational research. In: Jaeger RM (ed) *Complementary methods for research in education*, 2nd edn. AERA, Washington, DC, pp 73–99
- Barone T, Eisner E (2006) Arts-based educational research. In: Green J, Camilli G, Elmore P (eds) *Handbook of complementary methods in education research*. Lawrence Erlbaum, Mahwah, pp 95–109
- Benjaminson P (1992) Publish without perishing: a practical handbook for academic authors. National Education Association of the United States, Washington, DC
- Brew A (1999) Research and teaching: changing relationships in a changing context. *Stud High Educ* 24(3):291–301
- Butler-Kisber L (2002) Artful portrayals in qualitative inquiry: the road to found poetry and beyond. *Alta J Educ Res* 48(3):229–239
- Clandinin DJ, Connelly FM (1998) Personal experience methods. In: Denzin NK, Lincoln YS (eds) *Collecting and interpreting qualitative materials*. Sage, Thousand Oaks, pp 150–178
- Code L (1991) What can she know? Feminist theory and the construction of knowledge. Cornell University Press, Ithaca
- Davidson J (2004) 'I am a fieldnote': researching and teaching with visual data. *Qual Res J* 4(2):48–75
- Davis B (2008) Huh?! In: de Freitas E, Nolan K (eds) *Opening the research text: critical insights and in(ter)ventions into mathematics education*. Springer, New York, pp 81–85
- Denzin NK (1998) The art and politics of interpretation. In: Denzin NK, Lincoln YS (eds) *Collecting and interpreting qualitative materials*. Sage, Thousand Oaks, pp 313–343
- Denzin NK, Lincoln YS (eds) (1998) *Collecting and interpreting qualitative materials*. Sage, Thousand Oaks
- Denzin NK, Lincoln Y (2000) The discipline and practice of qualitative research. In: Denzin NK, Lincoln Y (eds) *Handbook of qualitative research*, 2nd edn. Sage, Thousand Oaks, pp 1–28
- Diamond CTP, Mullen CA (eds) (1999) *The postmodern educator: arts-based inquiries and teacher development*. Peter Lang, New York
- Eisner E (2006) Does arts-based research have a future? *Stud Art Educ* 48(1):9–18
- Finley S (2003) Arts-based inquiry in QI: seven years from crisis to guerrilla warfare. *Qual Inq* 9(2):281–296
- Gordon M (2006) Welcoming confusion, embracing uncertainty: educating teacher candidates in an age of certitude. *Paideusis* 15(2):15–25
- Kincheloe J (1997) Fiction formulas: critical constructivism and the representation of reality. In: Tierney WG, Lincoln YS (eds) *Representation and the text: re-framing the narrative voice*. State University of New York Press, New York, pp 57–79

- Lather P (1991) *Getting smart: feminist research and pedagogy with/in the postmodern*. Routledge/Chapman & Hall, New York
- Lather P (1996) *Troubling clarity: the politics of accessible language*. *Harv Educ Rev* 66(3):525–545
- Lather P (1997) *Drawing the line at angels: working the ruins of feminist ethnography*. *Qual Stud Educ* 10(3):285–304
- McWilliam E (1997) *Performing between the posts*. In: Tierney WG, Lincoln YS (eds) *Representation and the text: re-framing the narrative voice*. State University of New York Press, New York, pp 219–232
- Moore A (2004) *The good teacher: dominant discourses in teaching and teacher education*. RoutledgeFalmer, London
- Moxley JM (1992) *Publish, don't perish: the scholar's guide to academic writing and publishing*. Greenwood Press, Westport
- Ninnes P, Metha S (2000) *Educational research undone: the postmodern embrace*. (Book review). *Comp Educ Rev* 44(2):205–216
- Nolan K (2005) *Publish or cherish? Performing a dissertation in/ between research spaces*. In: Barnett R (ed) *Reshaping universities: new relationships between research, scholarship and teaching*. McGraw-Hill/Open University Press, Maidenhead, pp 119–135
- Nolan K (2007) *How should I know? Preservice teachers' images of knowing (by heart) in mathematics and science*. Sense Publishers, Rotterdam
- Polkinghorne DE (1997) *Reporting qualitative research as practice*. In: Tierney WG, Lincoln YS (eds) *Representation and the text: re-framing the narrative voice*. State University of New York Press, New York, pp 3–21
- Richardson L (1995) *Writing-stories: co-authoring 'The Sea Monster', a writing-story*. *Qual Inq* 1(2):189–203
- Richardson L (1998) *Writing: a method of inquiry*. In: Denzin NK, Lincoln YS (eds) *Collecting and interpreting qualitative materials*. Sage, Thousand Oaks, pp 345–371
- Roget's Interactive Thesaurus, 1st Ed. (2003). Electronic version published by Lexico Publishing Group, LLC
- Roth W-M (2005) *Auto/biography and auto/ethnography: praxis of research method*. Sense Publishers, Rotterdam
- Sinner A, Leggo C, Irwin R, Gouzouasis P, Grauer K (2006) *Arts-based educational research dissertations: reviewing the practices of new scholars*. *Can J Educ* 29(4):1223–1270
- Springgay S, Irwin R, Leggo C, Gouzouasis P (eds) (2008) *Being with a/r/tography*. Sense Publishers, Rotterdam
- Tierney WG (1998) *Life history's history: subjects foretold*. *Qual Inq* 4(1):49–70
- Webster's Revised Unabridged Dictionary (1998) Version published 1913 by the C. & G. Merriam Co., Springfield, Mass., Under the direction of Noah Porter, D.D., LL.D. Electronic version is copyrighted (C) 1996, 1998 by MICRA, Inc. of Plainfield, NJ. Last edit February 3, 1998

Wanda Hurren

Abstract

In this vignette, Wanda Hurren presents mapwork as one possible arts-based approach that disrupts standard expectations within educational inquiry. The author describes mapwork as a process that recognizes the constitutive role of text regarding our notions of the world and our notions of our selves. Mapwork links people to places and involves combining various place-related texts (expository, poetic, traditional maps, hand-drawn maps, images, photographs, etc.) with personal experiences of a place, and then collaging these various texts and experiences to create a new map or collection of maps. The resulting mapwork, in effect, interrupts standard expectations regarding cartographic “truth” and modernist assumptions of the fixed nature of places and people/identities. As a process that can be taken up in research studies wherein place is a prominent feature, mapwork can also be used as a pedagogical approach within social studies and geography classrooms. The author posits useful questions for researchers to consider before taking up mapwork as an inquiry approach and provides sample steps to follow when beginning mapwork inquiry. An excerpt from an atlas of mapwork, in the form of a partial glossary of words, phrases, and photographs, is included.

Keywords

Mapwork • Arts-based research • Place • Identity • Inquiry

To begin, I want to extend my appreciation and gratitude to Kathleen Nolan, for her articulate performance regarding re/presenting research. I believe her chapter both explicates and performs, in the same moment, the ideas she desires to communicate. These ideas, as I have encountered them in her chapter are, firstly, if we change the way we represent research in education, from standard approaches to playful and alternative ways, we open up the possibility of extending the ideas informing the research and extending the very “results.” And secondly, representation is not just about writing up the results – it is also an opportunity for further promoting the ideas and theories underlying the research itself. Nolan’s chapter is an illustration of the idiom: *It’s*

not just what you say, it’s also how you say it. When she is writing about disrupting traditional ways of knowing, and traditional ways of showing what you know, in science, she disrupts the very forms used to show knowing in science such as textbooks.

Having similar disruptive intentions within my own educational research endeavours in social studies/geography curriculum, I would like to take the opportunity, in response to Nolan’s chapter, to share a small excerpt from an atlas I have been compiling as one component of a research project. The atlas is a compilation of mapwork¹ and related essays created over a period of several years. As a project that links people and places, mapwork involves combining

W. Hurren (✉)
Department of Curriculum and Instruction, University of Victoria,
Victoria, BC, Canada
e-mail: whurren@uvic.ca

¹ *Mapwork as an Approach to Exploring Place and Identity*. Three year study funded by the Social Sciences and Humanities Research Council of Canada, Standard Research Grant (410-2005-0298).

various place-related texts (expository, poetic, traditional maps, hand-drawn maps, images, photographs, etc.) with personal experiences of a place, and then collaging these various texts and experiences to create a new map or collection of maps. The resulting mapwork, in effect, interrupts standard expectations regarding cartographic “truth” and modernist assumptions of the fixed nature of places and people/identities. The mapwork included in the atlas is a disruption of what we have come to expect in terms of standard ways of researching and writing in the fields of geography, cartography, and curriculum studies, and the compilation illustrates arts-based strategies for expounding on issues of place and identity.

Mapwork is informed by poststructural perspectives that recognize the constitutive role of text regarding our notions of the world and our notions of our selves. Poststructurally, neither place nor identity is seen as a static entity. Each is always in a process of becoming: places change over time (who inhabits them, how they are used), and identity changes over time (often as a result of the particular places we inhabit or frequent). These changes are also a direct result of the particular discursive structures, such as maps and atlases, that we employ in our attempts to make sense of places and selves. The excerpt that follows, in the form of a partial glossary of words, phrases, and photographs, calls up the discursive structure of the atlas. During my public schooling days as a student and then later as a teacher, I often encountered classroom sets of atlases. A glossary was usually included at the back of the atlas, and as a student, I spent evenings memorizing the glossary entries for unit tests and final exams – so that I could show what I knew. However, the glossary example shared in this vignette is not meant to be memorized in the ways I did as a child and it is referred to as “partial” in order to acknowledge the evolving and in-process aspect of locations. A complete compilation of words, phrases and photographs is not possible nor even desired.

While I was the lone compiler of this particular glossary, I could have invited others to contribute to the partial glossary, in a collaborative mapping project such as that which might be undertaken in a geography classroom where each student is responsible for contributing one word or phrase, or on a larger scale within a community mapping project. Further, such mapwork could also have been a collectively imagined and implemented research endeavour, participatory in all phases from identifying initial guiding “questions” to designing the process to selecting images and words. Regardless, given the intentions of my mapwork to call up links between people and places, the glossary would still be “partial”; it would illustrate how one particular individual or group of “cartographers” mapped one particular place.

The photographs in the glossary excerpt are included in order to create aesthetic possibilities for calling up a visceral response in the reader/viewer, and are not included in order to fix a place in time. If I went again to the small town

featured in the partial glossary, I would surely map the location with a different set of words and phrases, and with a different collection of photographs.

As a way to explore links between people and places, in this case between me and the small town where I grew up, this partial glossary is meant to illustrate how I encountered the place through my walking and how my identity has been shaped by the place. And were I to author a research “report” grounded in this site, I could also include excerpts from the glossary as one way to situate the study, and as a way to situate myself within the study.

The process of mapwork can be described as a hybrid form of inquiry: auto-geo-carto-graphy; a process that disrupts what we have come to expect through traditional geographical and cartographical forms of inquiry. The atlas also disrupts expectations regarding what we might expect from the form of an atlas. The mapwork and essays in the compilation are presented in the form of a cross between an atlas and a catalogue, similar to that which would be published in connection with an art exhibition. As many of the mapwork examples featured in the atlas have been included in art exhibitions of photography and mixed media (Hurren 2008b, c, 2009b, 2010), the hybrid format of atlas/catalogue seems appropriate.

The following five general processes are involved in mapwork, and are presented as ways to begin a project: site study, document analysis, narrative inquiry, image-based inquiry, collage work. Although listed sequentially, these processes are not necessarily undertaken in linear fashion, and aside from site study, it is not necessary to include all components in one mapwork project. It has been my experience that each mapwork project I have conducted or witnessed takes on in some way the personality of the individual mapmaker/cartographer; thus, the possibilities are endless in terms of ways to conduct, compile and re/present mapwork.

Mapwork can be employed as an inquiry approach in social studies and geography classrooms whenever place is a prominent curricular issue, as is the case with field trips and site studies. For example, creating a partial glossary could be one way for students to explore a field trip location. Of central concern to this book, such mapwork, in particular compiling a partial glossary, can also be used within research projects whenever place is seen as a determining factor. Researchers are encouraged to consider the following questions when determining whether or not they might take up mapwork within their study, either as framing a methodology or as a way to become familiar with the research site:

- (How) Does “place” influence my research question?
- Would moving my study to another location affect in any way the outcomes?
- What do I (need/want to) know about the place (school, classroom, neighbourhood, etc.) where my research is situated?



Fig. 69.1 Small town remembered: a partial glossary of words and phrases (Photography and mixed media. Xchanges Gallery, Victoria, BC. May, 2008)

Sensitizing activities to consider if using mapwork within a research site/study, include:

- Making a list of things seen, felt, heard, smelt
- Creating a web of various aspects noticed
- Completing framing sentences, such as: In this place I feel. . . In this place I want to. . . In this place I wonder. . .

Excerpt from an Atlas

To begin collecting data for the mapwork atlas project, I travelled to the small town in southeast Saskatchewan where I grew up, and walked along the streets and sidewalks. The town was “quiet”; very few vehicles or signs of people – empty houses, empty streets, empty sidewalks. On my walks around the town, I began to remember stories and events from my years of growing up there, and as I walked I created a list of words and phrases along with several photographs related to the everyday places from my childhood. The resulting partial glossary, included in this vignette, was created in the form of an accordion fold booklet, and is just one example of the many possible formats that mapwork can take (see Hurren 2008a, 2009a) (Fig. 69.1).

Small Town Remembered: A Partial Glossary of Words and Phrases

A good place to grow up is what some people say about their small town. Especially the people who played on the hockey team or the volleyball team or the basketball team. Or the people who still live in the small town. If it still exists (see ZERO POPULATION GROWTH).

Back alleys with one exception, were never called lanes (see LOVERS’ LANE). Kids smoked and peed in them. They were often badly rutted and sometimes had sections of

white ash where burning barrels had been dumped out. Back alleys were shortcuts we might take, especially at night, when the streetlights were out, and it was cold and windy, and we thought someone was probably following us, and we had to run. *What was that noise? Did you hear that?*

Burning barrels were in every backyard. Someone was always burning garbage, usually in the evening. Never a pleasant smell. Most had holes in their brown rusted metal sides. Did look nice burning in the dark. Made it easy to say, “No, we had not been smoking.”

Bum a smoke is what someone would always need to do. Or maybe pay a nickel for a *Sweet Cap* or *Macdonald’s Menthol*.

Central was a name synonymous with the telephone operator. We called CENTRAL to find out: what time did the dance start, what time was the grad banquet (oh, and was it in the Lutheran Church auditorium or the Catholic Church auditorium), what time was the funeral, what time would the water be turned back on, what time was it anyway. . .

Cherry Cha Cha was the dessert women took to the curling rink, skating rink, church potluck supper, sports day barbecue, graduation banquet, etc. Main ingredients: canned cherry pie filling, graham cracker crumbs, miniature marshmallows.

Circle meetings for Lutheran church women were held in someone’s home once a month. *Service* informed these meetings, as in *servicing the Lord*; and *what will she serve for lunch* (see CHERRY CHA CHA).



Coffee Row gathered each weekday afternoon at the café on Main Street. Heavily attended by men (Protestant and Catholic) on rainy days and during winter months (see DID YOU HEAR ABOUT... , EVERYONE WILL HEAR ABOUT IT, NOTHING TO DO).

Culverts were buried under most driveways. Sometimes children, slipping over a driveway or running barefoot in the ditch after a rain, gashed their ankles on culvert edgings. Older “children” used them to hide away a six pack of beer (see PULLING BEER).

Did you hear about. . . (see EVERYONE WILL HEAR ABOUT IT)

Everyone will hear about it *sooner or later, so I might as well tell you now* was often the phrase heard before disclosures of pregnancies, bankruptcies, marriage breakups, speeding tickets (see LIQUOR RAPS).

Forts were built in snow, bushes, grass, willows, trees. Anywhere. Shelter from the wind. Secretive, each a small space out in a very large one.

General Ring (see CENTRAL).

Henry Cubam lived alone in a shack in the back alley, until 1 year a bachelor took him into his home. Gave him new clothes and a bed and regular meals. One New Year’s Eve Henry froze to death in a snowdrift beside his old shack. He had forgotten he didn’t live there anymore.

Iris LeBlonde lived across the street in a small house with brown shingle siding. She spoke with a gruff, French accent and liked to bake cookies for children. Once she gave us homemade wine to drink along with our gingersnaps.



Jello Desserts were always on the lunch counter at curling bonspiels. Orange, cherry, or grape, and always with miniature marshmallows mixed in (see CHERRY CHA CHA).

Knicky Knocky Nine Doors (see NOTHING TO DO)

Light the Barrel (see BURNING BARREL)

Liquor Raps usually a \$64.00 charge for open liquor in a vehicle, never accompanied by breathalyzer tests, or charges for drinking underage. And guys would take the rap for girls, even paying the \$64.00. Especially if they wanted a date next weekend.

Lovers’ Lane was the name given to the back alley by the school. Lovers in cars drove very slowly along the lane and sometimes stopped to neck or “go further” (see EVERYONE WILL HEAR ABOUT IT).

Main Street was one of two paved streets in town. U-turns were permitted at each end. Angle parking only.

Never swim in a dugout (see DID YOU HEAR ABOUT... , NOTHING TO DO)

Nothing to do (see KNICKY KNOCKY NINE DOORS, RAIDING GARDENS, THERE’S NOTHING TO DO, WHAT CAN WE DO)

Old bachelors lived in some of the houses, and gave us peppermints. Some tried to kiss us when we came close. Like Mr. Salvey. Oh, wait, he was not a bachelor – he was married to Mrs. Salvey. What was she thinking?

Parking meters were absent (see MAIN STREET).

Pulling Beer (see BACK ALLEYS, CULVERTS, LIQUOR RAPS)

Raiding gardens (see NOTHING TO DO, SUMMER HOLIDAYS)

Summer holidays seemed extra long. The days were warm, and evenings were filled with a cool blueness. Mornings were fresh and the screen door was the only door to close until noon, when everything was closed up until evening (see A GOOD PLACE TO GROW UP).

There’s nothing to do (see NEVER SWIM IN A DUGOUT, NOTHING TO DO, RAIDING GARDENS)

Uptown (see MAIN STREET)

Village Office (see MAIN STREET)

Walking the streets is what we did, hoping that someone driving around might pick us up and then, maybe, we would hear our favourite song on the car radio (see BUM A SMOKE).

What can we do? Spit in a shoe. Send it to the teacher at half past two.

Who does she think she is? is what they said about her when she opened her own chequing account even though she still used her husband’s account for groceries. *And she never goes to Circle* (see CIRCLE).

Wooden sidewalks made running dangerous. And things were always falling down between the slats. Once, when my sister accidentally dropped the silver initial ring she got from her boyfriend G.H., we used coat hangers to fish for it.

X was never seen on lit crosswalk signs. Well, crosswalk signs were never seen. Signs were sometimes seen. Once Lillian Dupuis answered the door to an angel. She invited the angel in for dinner. She told everyone about the angel and said it was a sign (*. . .that you’re crazy* is what some people thought; see CIRCLE, COFFEE ROW, DID YOU HEAR ABOUT...).

Youth groups would start up every once-in-a-while. The activities were full of goodness. Often an underlying Protestant theme of “just don’t have too much fun” could be detected (see CIRCLE).

Zero population growth (see A GOOD PLACE TO GROW UP)



Acknowledgements Permission granted by Sense Publishers for reprinting portions of the partial glossary of words and phrases which were previously published in: Hurren (2009a). The convenient portability of words: Aesthetic possibilities of words on paper/postcards/maps/etc. In M. Pendergast, C. Leggo and P. Sameshima (Eds.), *Poetic*

Inquiry: Vibrant voices in the social sciences (pp. 229–238). The Netherlands: Sense Publishers.

Note on Contributor

Wanda Hurren is a photographer/cartographer living at 48° 25' 43" N, 123° 21' 56" W on Vancouver Island, just off the west coast of Canada. Her arts-based research focuses on notions of place and identity, and aesthetic influences on the same. Her photographs and poetry have been included in art exhibitions and academic and literary publications. She is an Associate Professor in the Department of Curriculum & Instruction at the University of Victoria in British Columbia, Canada.

References

- Hurren W (2008a) Postcartographia: a mapwork project about identity and place. *Can J Environ Educ* 13(2):43–49
- Hurren W (2008b) Mapwork. Exhibit of photographs and mixed media. Group Exhibition. In: 28th Anniversary Art Education Faculty Exhibition, McPherson Library Gallery, University of Victoria, Victoria, Jan 2008
- Hurren W (2008c) Postcartographia. Exhibition of photography and mixed media. Xchanges Gallery, Victoria, May 2008
- Hurren W (2009a) The convenient portability of words: aesthetic possibilities of words on paper/postcards/maps/etc. In: Pendergast M, Leggo C, Sameshima P (eds) *Poetic inquiry: vibrant voices in the social sciences*. Sense Publishers, Rotterdam, pp 229–238
- Hurren W (2009b) Mapwork: constructing sights. Exhibit of photography and mixed media. Group exhibition. In: 29th Anniversary Art Education Faculty Exhibition, McPherson Library Gallery, University of Victoria, Victoria, Jan 2009
- Hurren W (2010) Mapwork: ar•chi•tec•ton•ics. Exhibit of photography and mixed media. Group exhibition. In: 30th Anniversary Art Education Faculty Exhibition, McPherson Library Gallery, University of Victoria, Victoria, Jan 2010

Carl Leggo and Pauline Sameshima

Abstract

Fiction (with its etymological connections to the Latin *ingere*, to make) is a significant way for researching and representing lived and living experiences. As fiction writers, poets, and education researchers, we promote connections between fictional knowing and inquiry in educational research. We need to compose and tell our stories as creative ways of growing in humanness. We need to question our understanding of who we are in the world. We need opportunities to consider other versions of identity. This is ultimately a pedagogic work, the work of growing in wisdom through education, learning, research, and writing. The real purpose of telling our stories is to tell them in ways that open up new possibilities for understanding and wisdom and transformation. So, our stories need to be told in creative ways that hold our attention, that call out to us, that startle us.

Keywords

Narrative research • Fiction • Truth • Discourse • Postmodernism

In Praise of Fiction

Fiction (with its etymological connections to the Latin *ingere*, to make) is a significant way for researching and representing lived and living experiences. As fiction writers, poets, and education researchers, we promote connections between fictional knowing and inquiry in educational research. We support a poetics of research by investigating ways that creative writing contributes to knowing and understanding. In our writing, we seek to live attentively in the moment, and to know the momentousness of each moment. We try to enter lived experiences with a creative openness to people and experiences and understandings. Above all, we aim to make a story in collaborative dialogue with others, always aware that the story is one of many stories, one of many versions of the story. Like Paulo Freire (1997), we are eager to “produce forms of knowledge that do not exist yet”

(p. 31). We are also concerned about the hegemony of certain kinds of discourse in academic research. We need spaces for many kinds of research, including research that focuses on fictional, narrative, autobiographical, artful, creative, and poetic knowing.

Writing fiction in and as educational research has been promoted in the works of many scholars, including Stephen Banks (2008), Marion Crook (2001), Elizabeth de Freitas (2003), Rishma Dunlop (1999), Douglas Gosse (2005), Kilbourn Brent (1998), Carl Leggo (2005), Pauline Sameshima (2007), Eve Sedgwick (2000), Herman Stark (2003), and Sean Wiebe (2008). One of the most intriguing recent examples of fiction in education research is Ernest R. House’s (2007) *Regression to the Mean: A Novel of Evaluation Politics*. House is an Emeritus Professor at the University of Colorado at Boulder with an impressive record of research in education evaluation. Using the fictional genre expressly as a teaching tool, House captures the intricacies of evaluation politics while entertaining and enthralling the reader through the plot line.

Regarding fiction and reality in research, we are encouraged by Jean Vanier’s (1998) commitment to following “what the ancients called ‘*scientia cordis*,’ the

C. Leggo (✉) • P. Sameshima
Faculty of Education, University of British Columbia, Vancouver,
BC, Canada
e-mail: carl.leggo@ubc.ca

science of the heart” which leans firmly on “truth, flowing from experience” (p. 88). In his autobiography titled *Experience*, the novelist Martin Amis (2000) claims that “all writers know that the truth is in the fiction” (p. 28). Amis refers to fiction writing as transforming autobiographical experience “in the crucible, in the grappledrome, of my imagination” (p. 264), and we consider that all writing – narrative, autobiographical, poetic, expository, theoretical, pedagogic – resides in a desire to transform experience, emotion, and education in the grappledrome of the imagination. We write fictionally as a way to know ourselves and others in words and in the world. Walter Vanier’s Brueggemann (2001) claims that “imagination is indeed a legitimate way of knowing” (p. x). He is concerned with the need “to recognize how singularly words, speech, language, and phrase shape consciousness and define reality” (p. 64). We need imagination to break out of the stereotypes and to create other possibilities.

In our writing we are not trying to record the historical accuracy of events and experiences and emotions (as if any such historical accuracy is really possible). We are instead trying to hold the past in a certain light in order to interpret it. We are not hoping to exhaust the meaningfulness of the past, to claim a clear understanding, to consume the past and spit out a kernel. We especially appreciate writer Jeanette Winterson’s (1995) advice: “The question put to the writer ‘How much of this is based on your own experience?’ is meaningless. All or nothing may be the answer. The fiction, the poem, is not a version of the facts, it is an entirely different way of seeing” (p. 28).

In this chapter we argue we need to compose and tell our stories as creative ways of growing in humanness. We need to question our understanding of who we are in the world. We need opportunities to consider other versions of identity. This is ultimately a pedagogic work, the work of growing in wisdom through education, learning, research, and writing. The real purpose of telling our stories is to tell them in ways that open up new possibilities for understanding and wisdom and transformation. So, our stories need to be told in creative ways that hold our attention, that call out to us, that startle us.

In his article “Fictional Theses,” Brent Kilbourn (1999) suggests that the debates and exchanges on educational research between Eisner (e.g. 1991) and Phillips (e.g. 1995), and Eisner and Gardner, in the 1980s and 1990s, although critically important for grappling with *meaning* and *truth* as central issues connected to traditional notions of the meaning of fiction, were, however, conducted with “sparse reference to actual instances of educational writing” (p. 27). Since then, many more researchers have employed fiction as a means to address communicability and accessibility – to write in ways that beckon meaning to one’s readers, to address the art of writing, the “continuities (and cross-overs)” (Banks and Banks 1998, p. 54) which will make educational research writing engaging.

In her research of why well regarded fiction writers were leaving journalism, Shelly Fisher Fishkin (1985) found that the reasons included “censorship, boredom, and most important of all, a sense that conventional journalism could engage a reader’s mind and emotions in only very limited ways” (p. 3). This has traditionally been true for academic writing as well. Laurel Richardson and Elizabeth St. Pierre (2005) posit that despite the blurring of genres, and the introduction of many new alternative texts, the major difference that separates fiction writing from science writing is the writer’s intention and overt declaration which then draws different audiences and has “different impacts on publics and politics – and on how one’s ‘truth claims’ are to be evaluated” (p. 961).

Thus Kilbourn (1999) describes how he handles *meaning* and *truth* in fictional work by describing Stephen Pepper’s (1942) work on differentiating two ways for handling evidence. Using Pepper’s example of buying a chair, Kilbourn explains that *multiplicative corroboration* of evidence rests in “repeated observations of the same phenomenon in repeated empirical tests that corroborate each other and that are corroborated by many observations by many individuals” (p. 27). So if one were buying a chair, one would empirically test the chair by observing people of all sizes repeatedly sitting in it. *Structural corroboration*, on the other hand,

is a matter of different kinds of information converging on the same conclusion. The stress is on structural connection and coherence. . . . Circumstantial evidence is one variety of structural corroboration. When buying a chair, one would “examine its structure, note its construction, . . . and note the reputation of the manufacturer. (p. 27)

Kilbourn argues that concepts such as truth and meaning are not stable in an empirical sense. He promotes academic writing which demonstrates a self-conscious method. He says the writing:

should betray the author’s sensitivity to concerns of epistemology, to concerns about the connection between method and meaning. . . . The author should explicitly demonstrate an awareness of his or her role as a writer, . . . [and] make clear her or his sensitivity to the conceptual and methodological moves made during the study and the presentation of the study as a readable document. (p. 28)

While some scholars question how far relativistic research should go, Kilbourn’s counterargument is that structural corroboration does not have an “unbounded field.” Isaac et al. (1992) raise a similar concern in discussions of fiction being used in dissertation writing. These researchers suggest that the dissertation provides a particular standard, central focus, and shared experience for all PhD programs and thus demands regulation. Nell Duke and Sarah Beck (1999) caution education departments to continue to emphasize training in methodological processes and to maintain high standards of research quality.

Vigorous debates about the value of fiction in quality educational research will continue to be a part of ongoing scholarly conversations about the philosophies and practices of research methodologies. As fiction writers and poets in Faculties of Education, we are actively involved in those conversations, but our main purpose in this chapter is to focus on the etymology of fiction as *making* or *shaping* in order to address the pressing question: How can we learn how to write effective and evocative stories in and as educational research?

Story, Interpretation, Discourse

In much of our own research, we focus our investigations on three principal dynamic areas which we call *story*, *interpretation*, and *discourse*. These three areas of focus are integral in all kinds of research involving narratives, including phenomenology, ethnography, action research, memoirs, case studies, life writing, biography, autobiography, creative non-fiction, poetry, drama, and fiction. We understand *story* as *what happened*. Therefore, story can be researched by asking the journalist's questions: who? what? when? where? why? how? Then, *interpretation* addresses the basic question of *so what*. In other words, what is the significance of the story? Finally, *discourse* is all about *how* we tell the story. Discourse refers to the rhetoric of storytelling, the art and science of shaping and constructing a story for communicating to others.

In educational research the question of interpretation is often cast as the most important question because so much educational research is focused on conclusions and implications. The educational researcher is always asking and asked questions of the kind: *What does this mean for practice and policy?* Ardra Cole and Gary Knowles (2001b) and Norman Denzin (1997) urge researchers to interpret and explicate the pedagogical, theoretical, transformative potential and significance of research inquiry, agreeing that an entertaining story is not enough. Cole and Knowles (2001a) even suggest that "knowledge claims made must be made with sufficient ambiguity and humility to allow for multiple interpretations and reader response" (p. 127). Further, narrative work must contribute to research. It must answer the "So what?" question.

Of course we agree, but while certainly paying attention to story and interpretation, we still focus much of our research on questions, issues, strategies, and processes related to the art of discourse. In an insightful and wide-ranging review of narratology, Paul Copley (2001) notes that "human beings, especially after the development of the verbal faculty, have constantly told stories, presented events and squeezed aspects of the world into narrative form" (p. 2). Copley observes with a kind of epigrammatic simplicity that

"wherever there are humans there appear to be stories" (p. 2). Many writers have made comments about the prevalence and importance of stories for human beings. Jerome Bruner (1987), with references to Ricoeur, writes that "we seem to have no other way of describing 'lived time' save in the form of a narrative" (p. 12). Likewise, Rosemary Sullivan (1995) is convinced that "we live our lives as narratives" (p. xiv), while D. M. Thomas (1998) plainly states that "we all live in our own unique and semi-fictional novel" (p. 350). Robert Fulford (1999) notes that "stories are how we explain, how we teach, how we entertain ourselves, and how we often do all three at once. They are the juncture where facts and feelings meet" (p. 9), while Jean Clandinin and Michael Connelly (2000) ground their extensive research and writing in a simply stated premise: "if we understand the world narratively, as we do, then it makes sense to study the world narratively" (p. 17).

Like Amis (2000), we are eager to engage in practices of narrative research that honour the tangled complexity of lived experience. Winterson (1995) asks, "Are real people fictions?" and then proposes that "we mostly understand ourselves through an endless series of stories told to ourselves by ourselves and others. The so-called facts of our individual worlds are highly coloured and arbitrary, facts that fit whatever fiction we have chosen to believe in" (p. 59). As researchers we are encouraged by Winterson's realization that "it may be that to understand ourselves as fictions, is to understand ourselves as fully as we can" (p. 60) because if we are always making up stories and being made up in stories, then there is room for critical inquiry and creative transformation. As curriculum scholar Ted Aoki (1994) explains: "Whenever I write a story, I not only produce a narrative but I'm reproducing myself. The very narrating acts upon me, and I'm changing" (p. 10). Aoki understands the role of language, discourse, and writing in the construction of identity, particularly in the idea, understanding and reworking of curriculum. Equally, we agree with Winterson's (1995) conviction that "a writer must resist the pressure of old formulae and work towards new combinations of language" (p. 76). Be it in curriculum or inquiry, to understand our story-making as a process of working with language is to attend to Dwayne Huebner's (1999) challenge to educators to "affirm the significance of the imagination" (p. 432).

Therefore, we contend that researchers using narratives should attend to language and the rhetoric of story-making. In this regard, we find the distinction valuable between *story* and *plot* offered by Robert Bullough, Jr. and Stefinee Pinnegar (2001, p. 17). They understand a story as a sequence of events narrated in a linear, chronological order. In other words, a story is a simple and straightforward telling of events. A plot, on the other hand, is a sequence of events that has been arranged in order to evoke in readers a

keen sense of emotional engagement. Bullough and Pinnegar note “that most self-studies that rely on autobiography embrace the story form rather than the plot lines of fiction” (p. 17). And we submit that the same observation can be made about the use of most narratives in educational research.

It is our contention that there is a need to expand the possibilities of narratives in educational research by paying more attention to the ways that language and rhetoric shape both narration and understanding. Therefore, we agree with Bullough and Pinnegar (2001) who acknowledge that “the linearity and simplicity of the story form undoubtedly appeals to the training of teacher educators, particularly for those grounded in the sciences, psychology, teaching methods, and history” (p. 17), but still recommend that more researchers should explore the possibilities of focusing on plot: “The difference between the story form and the plot lines of fiction may be under-appreciated in narrative self-study research. It is our belief that the neglected plot line literary form may enable special insight into learning to teach and teaching” (p. 18).

As illustrated above, many scholars and writers argue that human beings are epistemologically, ontologically and actively engaged with narrative knowing, being, and becoming. And, therefore, one of the most pressing challenges in making and using narratives in educational research is that everybody lives stories, all the time, and everybody hears and views the stories of others, all the time. Indeed, we can expand on the ubiquity of stories by also attending to the stories of dreams, imagination, fantasy, and memory. We hear stories from friends and strangers; we view stories on TV, including some that are fictional and some that are factual; we understand the past in terms of stories, just as we understand the future in stories (just consider the popularity of William Gibson’s futuristic novels or the recent stunning commercial success of the fantastic eschatological tales of Tim LaHaye and Jerry B. Jenkins). The process of teaching is integrally connected to processes of story-telling. We explain our actions in stories, and we tell the same stories over and over at family gatherings. Our spiritual beliefs, our sense of national identities, our accounts of emotional and psychological needs and desires are all woven through and through with stories. But, in spite of the impressive prevalence of stories in our lived experiences, most of us have great difficulty telling our stories. Most of us have little confidence about our abilities as story-tellers. Where does this lack of confidence come from? We argue that one of the main sources behind a lack of confidence in telling our stories, even as scholars and researchers, derives from our school experiences with composing stories.

In school we learn that good stories need many elements. The process of making a story is often taught as a process

much like baking a cake. The good story-writer mixes various elements together in a way that imitates the stories encountered in literature anthologies. We spend a lot of time in school trying to imitate the kinds of stories that we read (or watch on TV) – stories with convoluted plots, and lots of suspense like spices, and strong emotions, and fast action, and hair-raising adventures. In school we seldom write about our daily lives, seldom write about the events, experiences, and emotions of growing up in local and specific places. The ordinary stories of family and neighbourhood experiences, lived daily, lived year after year, are apparently not appropriate or legitimate or sufficient for writing stories in school.

Cobley (2001) observes that “catching the bus, going out with friends, performing mundane tasks at work, watching football – none of these come to fruition as stories unless we choose to impose some kind of narrative form on them” (p. 8). We disagree with Cobley, at least a little, because the mundane events of our lives *are* already stories, but they are only invested with significance in the ways they are told. Just as an artist represents a still image of the ocean rolling onto a beach, the writer holds a moment, or part of a moment, in order to draw attention to it. In this way the artist and the writer present to us images that are emblematic of the billions of moments that are given little attention. Of course, it is impossible to present every moment of lived experience because it usually takes a long time to represent even a moment. For example, the poet lingers with words; the photographer lingers with light; the artist plans and dreams and seeks the lines and hues. Like the ocean that ebbs and flows, minute after minute, hour after hour, day after day, week after week, year after year, century after century, millennium after millennium, lived and living experience is part of a flow, a process, with beginnings long lost and conclusions mysteriously hidden. Our goal in fiction writing is to represent, to present again, moments of the process so we can linger with them, learn about them, lean on them for education and transformation.

Challenges of Fiction

What writers, story-tellers, and artists of all kinds attempt to do is frame fragments of experience in order to remind us that there is significance in the moment, in the particular, in the mundane. But that significance is highlighted in stories that are told and written in engaging and evocative and energetic ways. We are not interested in hearing what a friend ate for breakfast unless the story is told in a way that is full of interest. We all know acquaintances who are boring. Why are they boring? Perhaps because they have told their stories, the same stories in the same ways, many times already, or perhaps because they tell the stories with no interest in hearing others’ stories, without any commitment

to dialogue and reciprocity, or perhaps because they have no awareness of their audience and tell the stories only because they enjoy hogging the spotlight.

From the perspective of the novelist, Amis (2000) claims:

the trouble with life . . . is its amorphousness, its ridiculous fluidity. Look at it: thinly plotted, largely themeless, sentimental and ineluctably trite. The dialogue is poor, or at least violently uneven. The twists are either predictable or sensationalist. And it's always the same beginning; and the same ending. (p. 7)

But we disagree with Amis, and we suspect that he is simply making an extreme point for the sake of emphasis. There is nothing any more ridiculous about the fluidity of life than there is anything ridiculous about the creative abundance of the universe. We could complain that there is something ridiculous about all the stars in the night sky, or all the species of plants, animals, fish, and insects in the earth. Life is abundant, and narrative inquiry is a way of focusing on some particulars of that abundance. According to Fulford (1999), the popularity of narrative is due to “the ability to bestow meaning on otherwise disorganized events” (p. 113). We are not sure that narrative bestows meaning as much as it recognizes some of the possibilities of meaning that lie always in the seemingly tangled messiness of lived experience.

We must keep in mind that there are really only a few stories. Essentially, the entire population of billions of people on the planet Earth, with all our distinct cultural, economic, epistemological, ethnic, geographical, historical, ideological, political, sociological, and spiritual differences, still live the same basic stories. We all share experiences of desire, fear, relationship, birth and death, pain and fear, joy and sorrow. So, we are not going to learn a great deal that is startlingly new from listening to another person's story. To paraphrase the ancient Hebrew preacher whose wisdom is recorded in the *Book of Ecclesiastes*, there is hardly anything new under the sun, moon, or stars. What really makes a story interesting and valuable, then, is the way it is told. We appreciate Clandinin and Connelly's (2000) notion of narrative as both phenomenon and method. They explain that they “have been pursuing this work under the heading of *narrative inquiry* with a rough sense of narrative as both phenomena under study *and* method of study” (p. 4). In a related way, we are claiming that the story or experience is the phenomenon, and the discourse is the method. Basically we are calling for educational researchers to pay more attention to the ways they write or compose or construct narratives, and especially to focus on the value of fiction for representing reality.

Any discussion of discourse needs to begin with a careful consideration of the elements of narrative, including the following: action, allusions, anticlimax, atmosphere, balance, bathos, borders, change, characters, chronology, cliffhangers, climax, closure, coherence, communication,

conciseness, conflict, constraint, continuity, conventions, denouement, desire, details, detours, dialogue, distance, drama, emotion, emphasis, endings, events, exposition, fantasy, fiction, flashbacks, flow, foreshadowing, games, gaps, glosses, heart, humour, imagery, intrigue, irony, jeopardy, jokes, journeys, joy, keenness, keys, kinaesthesia, language, limits, linearity, memory, metaphor, mimesis, mood, motifs, movement, narrator, naturalism, order, organization, pace, parody, plants, plot, point of view, precision, problem, quests, questions, quotidian, reality, resolution, rhythm, satire, scenes, secrets, selection, series, setting, signs, silence, structure, summary, surprises, suspense, symbols, tension, theme, time, tone, understanding, undertone, unity, verisimilitude, vigour, vitality, voice, wisdom, wit, wonder, words, yearning, zeal, and zigzags. With so many elements available when composing narratives, we attend especially to matters of expression, to constructing stories with a clear and resounding sense of voice.

The real problem with advising a person about the craft of story-making is that much of the process is stubbornly idiosyncratic, always changing, culturally conditioned, exuberantly organic. For example, a basic rule often promoted in story-writing workshops is: *show, don't tell*. The import of the advice is that the story-writer should not tell the reader what to feel or think or how to respond. Instead, a good story-writer constructs characters who experience a sequence of events and emotions in ways that invite readers to enter vicariously into a sense of lived experience. Readers feel that a real world has been conjured, and they are dwelling in that world. But a basic rule like *show, don't tell*, is not a cardinal rule that must apply to all stories. In fact, there are no rules of story-making that are not malleable and contravened all the time. And certainly the ways of telling stories in one cultural community are different from the ways stories are told in another cultural community. So, an imaginative openness and flexibility regarding what a story is and can be is always needed.

This is particularly clear in what is now called postmodern fiction where the act of narrating is foregrounded (Marshall 1992). In describing postmodern fiction, Copley (2001) refers to “the ‘rupturing’ effect in fiction, an effect which consists of the narrating agency revealing itself” (p. 172). A memorable instance of this rupturing effect occurs in Woody Allen's film *Annie Hall* (1977). The character played by Woody Allen is standing in a line to purchase a ticket for a movie, while another person nearby is discussing the views of Marshall McLuhan. Woody Allen's character complains that the man doesn't understand McLuhan correctly, and an argument follows. To make his point, Woody Allen's character steps out of the line and addresses Marshall McLuhan (the *real* McLuhan who just happens to be standing behind a pillar a few feet away). Woody Allen's character asks, “Is that what you meant?” McLuhan responds, “No.” From this

kind of postmodern perspective, Woody Allen continues to disrupt the conventions of seemingly transparent narration in films like *The Purple Rose of Cairo* (1985) where a matinee idol walks out of his movie and enters the world of a romantic woman performed by Mia Farrow. The idol soon proves to be much less romantic in the *real world* of Mia Farrow's character than he was in the movie that she enjoyed watching as an escape from her humdrum world.

There is a growing body of postmodern fiction and film narratives that are well-described by the phrase *postmodernist*. One of our favourite stories is David Arnason's (1992) "A Girl's Story" which plays innovatively with the conventions of story-writing, including stereotypical traits for characters, the prevalence of symbols, and the traditions of romance. In "A Girl's Story" the author/narrator is always breaking into the narration with comments on the process, including decision-making, difficulties, and frustrations. The author/narrator's voice is often cantankerous, critical, and cajoling. What is always fascinating is that, even though the story provides little space for the reader to enter vicariously into the story, it is, nevertheless, consistently funny and humane and engaging.

Fulford (1999) complains about "the energy that writers of the twentieth century have generated through distortions of storytelling" (p. 95). Fulford is concerned about those postmodern discursive practices that disrupt the straightforward, realistic narrative. Fulford's use of "distortions" is interesting because he assumes that there is a correct way to tell a narrative, and that postmodern disruptions of the traditional ways are to be avoided. Fulford claims:

In the most common view of postmodernists, narrative is a deception. The world is not a place of beginnings and endings and middles, a place of coherence – and when narrative arranges the world in that way in order to tell a story and reach out to an audience, narrative lies. If we insist on turning to fiction, it must be entirely self-conscious and must constantly remind us that it is indeed fiction. (p. 105)

We don't think that postmodernists are claiming that "narrative is a deception." Instead, we contend that postmodernists are concerned to give voice to the view that behind every story is another story, and that to tell one story is to silence numerous others. Postmodernists are not seeking to undermine the concept, practice, and significance of narrative. Instead, postmodernists are eager to expand the possibilities of narrative.

Ways to Tell a Story

There is no single way to write narrative fiction. As noted, basic advice claims that a story should show, not tell, but there are really no rules for narrative writing. In simple terms, stories can be as wide-ranging as the lived experiences of

people, and as limitless as the imagined experiences of people. In other words, there are no boundaries to the possibilities of story-making. Is this something we have forgotten both *in* and *as* educational research, particularly given the forms of expression and reporting that have come to dominate the representation and use of narratives in this field?

Most students in school writing classes learn that a story plotline is linear, and involves a progression from exposition to critical incident to rising action to the climax followed by the falling action or *dénouement*. As former school teachers we taught this understanding of the plotline many times. This notion of the plotline can be traced to Aristotle's *Poetics* (written in 350 BCE). Not only is this the prevalent, and often only, notion of plot presented in school classrooms, but the linear plotline is also a staple of TV situation comedies and dramas, and certainly many Hollywood movies, as well.

Carolyn Heilbrun (1999) observes that, "until just the day before yesterday, all narratives and plots were based upon and identified with the linear pattern of male sexuality" (p. 33). Heilbrun's comparison of the linear plotline leading to a single climax is very useful, and even though we don't think it is necessary or accurate to explain the linear plotline exclusively in relation to sexual experience, we appreciate Heilbrun's reminder that there are experiences that cannot be adequately represented by the linear plotline, and also that there are other ways of conceiving and representing experience. She further explains:

women may be said to have neither a path nor a linear rise and fall; rather, their sexual experience may be defined as a series of circles, a rhythm that may appear to men, and to those of us taught to think like men, unfamiliar, repetitive, and declining to proceed to a single, ordained finale. (p. 34)

There are many ways to tell a story. For example, like Ukrainian stacking dolls or Chinese boxes, a narrative structure can present a story inside a story inside a story. Or stories can be told as circles, or collage, or parallel accounts, or poetry, or photography. Stories can be narrated from multiple perspectives. Stories can be represented in a line that twists and turns, here and there, like a child exploring the hallways of a school on the way to the washroom. A story can be a series of hills and valleys like a heart monitor's report. The possibilities are numerous. A story can be like a series of buoys floating in the ocean, connected to a rope, a net perhaps, anchored to the bottom of the ocean, seemingly disparate but indeed connected. A story can be a series of postcards or letters, or a documentary, or a braid. A story can be a hypertext with numerous paths.

Consider Robert Altman's film *Short Cuts* (1993) based on the short stories of Raymond Carver in which the characters live their distinct experiences in the specific geographic locale of Southern California but almost never interact. Or consider a somewhat similar film like Paul Thomas Anderson's *Magnolia* (1999) with its multiple separate stories that are all

connected by a common experience of sadness and misery, with ultimately a hint of hope, stories that are only tangentially connected through the kind of daily incidental circumstances that lead to strangers crossing paths, even if only briefly. Or consider Peter Howitt's *Sliding Doors* (1998) which presents parallel stories with a "what if" premise. Or consider the episode of *Seinfeld* which narrates the events of a wedding by beginning at the end of the episode and telling the story backwards. Or consider a novel told in poetry like Sharon Creech's *Love That Dog* (2001). There are countless examples of innovative approaches to shaping narration in film, television, drama, and writing. In fact, the linear plot line might be a useful way to represent some stories, but it is, at best, only one way. It is not a truer way or a more useful way, just one way.

Cobley (2001) explains that "at their simplest, all narratives are the movement from a beginning point to a finishing point. Narrative is just a sequence which starts and moves inexorably to its end" (p. 9). But is this observation sufficient for understanding narrative as experienced by everybody all the time? Cobley's notion of narrative as "the movement from a beginning point to a finishing point" is dependent on the conception of a linear plot line. We think a more useful way of conceptualizing narrative is in terms of a rhizome where there is no centre from which everything grows in a specific direction. The rhizome goes in many directions, without a centre. In the same way, we find very useful the whole notion of hypertext for representing the storied life. In a hypertext, there are numerous paths and links, numerous ways of moving along and amidst the possibilities. Traditional narrative is bound up with an understanding of time. A person is born, grows up, grows older and older, and dies. Typically. So, life is perceived as linear. Robert Frost's familiar poem "The Road Not Taken" reminds us that our lives are substantially shaped by a youthful and necessary decision to follow one path and not another, but really we make choices to follow one path and not another all the time. It is not simply that when we are in our early twenties we decide to be a teacher instead of an astronomer or taxidermist, and that our lives are then prescribed for us. We make many choices throughout our lives, choose many paths, and exclude many paths. This is the way of living, and this is the way of narrative, too. We are always engaged in an ongoing process of selection and exclusion. Cobley notes that "narrative *selects* some events and omits others" (p. 7). Perhaps the important lesson to be learned from this process is that we must be cautious that we don't pretend that our life script is somehow predetermined, written for us, clearly etched like railway tracks that we are racing along.

While we question Cobley's notion of narrative as a linear movement, we agree with his explanation of how "the progress of fictional narrative must, necessarily, be impeded. . . . Narrative must entail some kind of delay or even diversions, detours and digressions" (p. 12). This is

how a story holds our attention. A story unfolds as a series of ruptures and crises. As Cobley understands, "*detours* are a crucial site of potential enjoyment in a narrative" (p. 13). So, again, the important point about making and using narratives in educational research is not necessarily about the actual events, emotions, and experiences that are narrated, but more relevantly about the *ways* in which the events, emotions, and experiences are narrated. In a related way, Sullivan (1995) observes:

we live our lives as narratives, examining them, interrogating ourselves, attempting to make our stories cohere. Like the novel of a good writer, we do not will our own plot. The plot evolves moment by moment out of accident, contingency, intuitive leaps. (p. xiv)

We especially appreciate the attention that Sullivan gives to the activity of dynamics like accidents and intuition in how our lives unfold as narratives. Sullivan understands the complexity of the process, the multiple possibilities that underlie and undergird any coherence and continuity in our life stories. She adds, "real lives are not like fiction; there can be no comfortable sense of closure, all the loose ends tied, solving the puzzle of a life" (p. 15). Of course not. And we would maintain, research papers should not maintain this 'fiction' either. Life is always a puzzle, but actually all stories are puzzles. The convention of fairy tales that end with "and they lived happily ever after" is still no more than a temporary close to the story. Whether they lived happily ever after or not, they continue to live, at least in the storied imagination, and that living will always be full of surprises and twists. As Amis (2000) contends, experience "outstrips all accounts of it – all ulterior versions" (p. 158). In Carol Shields' (1993, p. 340) novel, *The Stone Diaries*, the narrator asks insightfully, "what is the story of a life? A chronicle of fact or a skillfully wrought impression?"

As Sara Mills (1997) notes, subjects engage "in their own constitution, acquiescing with or contesting the roles to which they are assigned" (pp. 45–46). For Mills, "there is no intrinsic order to the world itself other than the ordering which we impose on it through our linguistic description of it" (p. 52). Therefore, "the only way we have to apprehend reality is through discourse and discursive structures" (p. 54). So, there is nothing simple about writing fiction as a way to research lived and living experiences. The researcher who pursues narratives and fiction will need to learn the intricate challenges that comprise the craft and art of narrative discourse.

The Question of Value

What always intrigues us about narrative inquiry as a form of educational research is, whether it is fictional, poetic, filmic, or scholarly, a story always opens up more questions than it provides answers. As Fulford (1999) understands,

stories, however valuable, may be puzzling as well as engaging. . . . Stories ostensibly begin in order to explain something, or to make an event clear. They turn an incident this way and that, throw several kinds of light on it, surround it with a certain mood – and then put it back in its place, still unexplained. (p. 8)

Michael Ondaatje (2002) explains, “in writing . . . you are always trying to find ways to forge alliances between unlikely things, striking juxtapositions, finding the right shorthand for ideas, metaphors” (p. 34). We agree with Ondaatje’s observation that the novelist is always “trying to find the right balance for the emerging organic form” (p. 136). While attending to the experiences that comprise a story, and while seeking to understand the interpretive significance of narrative though, the narrative researcher in education needs to attend to the discourse of narration, even perhaps operating with the conception of narration, not as a noun, something solid and fixed, but as a verb, *narrating*, always in process, full of generative action. To foster narrative inquiry as a verb requires constant vigilance regarding how the story is told, and how the story might be told, sustaining a creative connection with the plural possibilities of any narrating.

Ardra Cole and Gary Knowles (2001b) suggest that “when researchers have a particular commitment to pushing the boundaries of method and audience, representational form is central to the achievement of research goals” (p. 213). We concur with Cole and Knowles; as researchers we must “write *for* meaning rather than *to record* meaning.” In thinking about the quality, purpose, and method of our forms, we turn to Cole and Knowles’ “Defining Elements of [arts-informed] Life History Research” (2001a). These researchers hold that positivist conceptions of validity, reliability, and generalizability in the qualitative paradigm are “not appropriate for making judgments about qualitative research that is conducted from other paradigmatic vantage points” (p. 124). So while strategies of triangulation, transparency of the research process, depth of descriptive accounts, cross-site and cross-case analyses, length of time in the field, declaration of researcher bias, and so forth, are procedurally considered, judgments regarding value are steeped in alternate paths.

Kilbourn (1999) asserts that the strength of a piece of fiction or work is in its ability to show qualities of experience which can be recognized as true of people and situations. Sara Lawrence-Lightfoot and Jessica Hoffman-Davis (1997) believe that quality qualitative research is expressed as an aesthetic whole bound in resonance, authenticity, and coherence (p. 274). Richardson and St. Pierre (2005) asks if the work contributes to social life. Does the work have aesthetic merit which “opens up the text and invites interpretive responses? Is the text artistically shaped, satisfying, complex, and not boring?” (p. 964) She continues by asking if the author has demonstrated reflexivity, and if the work affects

the reader emotionally or intellectually, generates new questions, and moves the reader to try new research practices or to pursue transformative action.

On a personal note, when developing the epistolary fiction, *Seeing Red: A Pedagogy of Parallax*, Pauline Sameshima (2007) deeply considered Steinar Kvale’s (1995) article, “The social construction of validity”. With/ in postmodern framings, knowledge is socially constructed and validity encompasses the social construction of reality. Kvale suggests that research validity can be viewed through the quality of craftsmanship, the nature of its communicability, and its application and pragmatic value. Carefully crafted fiction that is communicable has many more possibilities of being pedagogical and pragmatic to its readers. Carolyn Ellis and Art Bochner (1998) suggest that “when these texts succeed, they encourage readers to feel, think about, and compare their own worlds of experience with those of the people they meet on the pages of these stories” (p. 8). Using various resources including those in aforementioned paragraphs, Sameshima created a checklist to guide the development of her research fiction. She asked if the work demonstrated:

- an understanding of the art of research?
- a disciplined in-depth study which transparently merges researcher, process, and product?
- a deep concern for pedagogical representation?
- an invitation to think, write, make, react, create?
- with humility, a contribution to knowledge or a contestation of the accepted?
- consideration of accessibility and communicability?

Cole and Knowles (2001a) suggest that form itself has the power to inform and that the representation of the work is the “main vehicle through which our scholarship becomes known and, for that matter, widely accepted or rejected by peers” (p. 122). Eliot Eisner (1991) believes that “the forms through which humans represent their conception of the world have a major influence on what they are able to say about it” (p. 7). Leon Edel (1984) further asserts that the quality of a written life “resides in the art of narration, not in the substance of the story. The substance exists before the narrative begins” (p. 15).

While writing *Seeing Red*, Sameshima was highly conscious of representational form and its effect on the content. By using an epistolary (letter) format, she intended for the reader of this research to affectively become part of the story – the letter reader is engaged in a monologic-dialogue which Thomas Beebe (1999) describes as one letter writer writing to one reader. The reader becomes responsible to the writer’s words because in the act of reading the letters voyeuristically, the reader is implicated, obligated to think about his/her responsibility to the writer. The use of the monologic nature of the epistolary genre demonstrates one possibility for consciously attempting to

amplify reading engagement. It is this focus on nurturing reading engagement which spurs our support of fiction writing, for it is this enactment, the demonstration of craftsmanship, communicability, and pragmatic value, which paves the way to the transformative potential of any work. Herman Stark (2003) argues that “form precedes content, and indeed lingers after” (p. 46). The form of representation of any work directly affects the effect of the research. If the work does not touch the heart of the audience, the understandings will not linger. The work must evoke and in order to evoke, the work must be passionate and engage the audience. In our research (and) fiction we seek to draw the audience to theorize their own situatedness through the vehicle of story, and in particular, the discourse of story – how we tell our stories.

Note on Contributor

Carl Leggo is a poet and professor at the University of British Columbia. His books include: *Growing Up Perpendicular on the Side of a Hill, View from My Mother's House, Come-By-Chance, Teaching to Wonder: Responding to Poetry in the Secondary Classroom*, and *Lifewriting as Literary Metissage and an Ethos for Our Times* (with Erika Hasebe-Ludt and Cynthia Chambers). Co-edited works include: *Being with Al/tography* (with Stephanie Springgay, Rita L. Irwin, and Peter Gouzouasis); *Creative Expression, Creative Education* (with Robert Kelly); and *Poetic Inquiry: Vibrant Voices in the Social Sciences* (with Monica Prendergast and Pauline Sameshima).

Pauline Sameshima is author of *Seeing Red: A Pedagogy of Parallax – An Epistolary Bildungsroman on Artful Scholarly Inquiry*, a work that challenges form, function, and research possibilities through literary genre. She is co-author of *Climbing the Ladder with Gabriel: Poetic Inquiry of a Methamphetamine Addict in Recovery* (with Roxanne Vandermause, Stephen Chalmers, and Gabriel), a biographic poetic memoir which also disrupts academic literary form as a means to create access to knowing. Pauline teaches arts integration, arts-informed research methods, and curriculum theory at Washington State University.

References

- Amis M (2000) Experience. Hyperion, New York
- Aoki T (1994) Interview with Ted Aoki. *Teacher* 6(7):10
- Arnason D (1992) A girl's story. In: Bowering G, Hutcheon L (eds) *Likely stories: a postmodern sampler*. Coach House Press, Toronto, pp 4–18
- Banks S (2008) Writing as theory: in defense of fiction. In: Knowles JG, Cole AL (eds) *Handbook of the arts in qualitative research*. Sage, Thousand Oaks, pp 155–164
- Banks A, Banks SP (eds) (1998) *Fiction and social research: by ice of fire*. Rowman Altamira, Lanham
- Beebee TO (1999) *Epistolary fiction in Europe 1500–1850*. Cambridge University Press, Cambridge
- Brueggemann W (2001) *The prophetic imagination*, 2nd edn. Fortress Press, Minneapolis
- Bruner J (1987) Life as narrative. *Soc Res* 54(1):11–32
- Bullough RV Jr, Pinnegar S (2001) Guidelines for quality in autobiographical forms of self-study research. *Educ Res* 30(3):13–21
- Clandinin DJ, Connelly FM (2000) *Narrative inquiry: experience and story in qualitative research*. Jossey-Bass, San Francisco
- Cobley P (2001) *Narrative*. Routledge, London
- Cole AL, Knowles JG (2001a) *Lives in context: the art of life history research*. Alta Mira Press, Walnut Creek
- Cole AL, Knowles JG (2001b) Qualities of inquiry. In: Neilsen L, Cole A, Knowles JG (eds) *The art of writing inquiry*, vol 1, Arts-informed research series. Backalong Books and Centre for Arts-informed Research, Halifax/Toronto, pp 211–219
- Creech S (2001) *Love that dog*. HarperCollins, New York
- Crook M (2001) *Moving the mountain: the story of one student's struggle to graduate from high school*. Unpublished PhD dissertation, University of British Columbia, Vancouver
- de Freitas E (2003) *The wrong shoe and other misfits: fiction writing as reflexive inquiry within a private girls' school*. Unpublished PhD dissertation, University of Toronto, Toronto
- Denzin NK (1997) *Interpretive ethnography: ethnographic practices for the 21st century*. Sage, Thousand Oaks
- Duke NK, Beck SW (1999) Education should consider alternative formats for the dissertation. *Educ Res* 28(3):31–36
- Dunlop R (1999) *Boundary Bay: a novel as educational research*. Unpublished PhD dissertation, University of British Columbia, Vancouver
- Edel L (1984) *Writing lives: Principia biographica*. W. W. Norton, New York
- Eisner E (1991) *The enlightened eye*. Macmillan, New York
- Ellis C, Bochner A (1998) Series editors' introduction. In: Banks A, Banks SP (eds) *Fiction and social research: by ice of fire*. Rowman Altamira, Lanham, pp 7–8
- Fishkin SF (1985) *From fact to fiction: journalism and imaginative writing in America*. Johns Hopkins University Press, Baltimore
- Freire P (1997) *Pedagogy of the heart* (trans: Macedo D, Oliveira A). Continuum, New York
- Fulford R (1999) *The triumph of narrative: storytelling in the age of mass culture*. Anansi, Toronto
- Gosse D (2005) *Jackytar*. Jespersion, St. Johns
- Heilbrun CG (1999) *Women's lives: the view from the threshold*. University of Toronto Press, Toronto
- House ER (2007) *Regression to the mean: a novel of evaluation politics*. Information Age Publishing, Charlotte
- Huebner D (1999) In: Vicki H (ed) *The lure of the transcendent: collected essays by Dwayne Huebner*. Lawrence Erlbaum, Mahwah
- Isaac P, Quinlan S, Walker M (1992) Faculty perceptions of the doctoral dissertation. *J High Educ* 63(3):241–268
- Kilbourn B (1998) *For the love of teaching*. The Althouse Press, London
- Kilbourn B (1999) *Fictional theses*. *Educ Res* 28(9):27–32
- Kvale S (1995) The social construction of validity. *Qual Inquir* 1(1):19–40
- Lawrence-Lightfoot S, Hoffmann-Davis J (1997) *The art and science of portraiture*. Jossey-Bass, San Francisco
- Leggo C (2005) Synonyms: fiction & knowing. In: Gershon W, Kelly T, Kesson K, Walter-Bailey W (eds) *(De)liberating curriculum and pedagogy: exploring the promise and perils of “scientifically based” approaches*. Educator's International Press, Troy, pp 85–98
- Marshall BK (1992) *Teaching the postmodern: fiction and theory*. Routledge, New York
- Mills S (1997) *Discourse*. Routledge, London

- Ondaatje M (2002) *The conversations: Walter Murch and the art of editing film*. Vintage Canada, Toronto
- Pepper SC (1942) *World hypotheses: a study in evidence*. University Press, Berkeley
- Phillips DC (1995) Art as research, research as art. *Educ Theory* 45 (1):1–7
- Richardson L, St. Pierre E (2005) Writing: a method of inquiry. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 959–978
- Sameshima P (2007) *Seeing red: a pedagogy of parallax*. Cambria Press, Amherst
- Sedgwick EK (2000) *Dialogue on love*. Beacon Press, Boston
- Shields C (1993) *The stone diaries*. Vintage Books, Toronto
- Stark H (2003) A fierce little tragedy: thought, passion, and self-formation in the philosophy classroom. In: Miller G (ed) *Philosophy of education*, vol 147, Value inquiry book series. Rodopi, New York
- Sullivan R (1995) *Shadow maker: the life of Gwendolyn MacEwen*. HarperCollins, Toronto
- Thomas DM (1998) *Alexander Solzhenitsyn: a century in his life*. St. Martin's, New York
- Vanier J (1998) *Becoming human*. House of Anansi Press, Toronto
- Wiebe S (2008) *What I meant to say about love: a poetic inquiry of unauthorized autobiography*. Unpublished PhD dissertation, University of British Columbia, Vancouver
- Winterson J (1995) *Art objects: essays on ecstasy and effrontery*. Alfred A. Knopf Canada, Toronto

Natasha G. Wiebe

Abstract

My doctoral dissertation explored different approaches that narrative researchers take when restorying, or retelling, the personal narratives shared by the participants in their research studies. I explored one of these approaches – restorying through character – with graduate students in a narrative inquiry course. The students experimented with using fictional characters to re-present both their experiences and ideas encountered in course readings. My vignette re-presents some of these students’ writing experiences in a fictional dialogue. The dialogue is written to both demonstrate – and experience firsthand – some challenges and benefits of re-presenting storied data through texts driven by fictional characters.

Keywords

Fictional character • Distance • Narrative inquiry • Persona • Restorying

Introduction

In my doctoral dissertation, I explored different ways that narrative researchers tell stories in their research writing (Wiebe 2010). More specifically, I described and modelled several approaches that researchers take to *restory*, or retell, the personal narratives shared by the participants in their research studies. One approach was suggested by my research with Canadian author Miriam Toews. Her critically-acclaimed and best-selling novel *A Complicated Kindness* (2004) tells the story of 16-year-old Nomi Nickel’s coming of age in a small Mennonite town in 1980s Canada. Interviews with Toews suggest that, through Nomi, Toews imagined what it was like to be a fundamentalist Mennonite Christian. While writing Nomi’s story, Toews also learned to distinguish between the intolerance of religious fundamentalism and the love and forgiveness possible in Christianity.

I wondered what narrative researchers could learn from Toews’ process of imagining herself to be the other through

a fictional character and, subsequently, coming to deeper understanding of “others in words and in the world” (Chap. 70 by Leggo and Sameshima, p. 540)? I was able to explore variations of this question with graduate students in a narrative inquiry course at my Faculty of Education. In online discussions and assignments, these students experimented with using fictional characters to re-present both their experiences and ideas encountered in course readings (e.g., Johncox et al. 2009; Mara 2009). The story that follows re-presents some student experiences of writing fictional characters. I wrote this story (and others) for my dissertation because I was dissatisfied with simply describing restorying through character as though I was writing a definition for a textbook. I also wanted to show rather than tell my readers – and experience firsthand – some challenges and benefits of re-presenting storied data through texts driven by fictional characters.

Restorying Through Character: A Fictional Dialogue

Setting: A narrative inquiry evening class at a faculty of education in southwestern Ontario. It’s flu season, so the already-small graduate class has dwindled to three

N.G. Wiebe (✉)
Office of Research Services, University of Windsor,
Windsor, Ontario, Canada
e-mail: nwiebe@uwindsor.ca

students and the teaching assistant. The students are reflecting on their first writing workshop, during which they shared excerpts from their upcoming assignments with classmates.¹

Natasha (the teaching assistant): Let's talk about one theme that emerged during the writing workshop: the research potential of restorying through a fictional character. By this, I mean taking the personal experiences that you're using as data and retelling these experiences through the eyes and voice of at least one character. This can be an imagined character. Remember the character of Jack, who re-presents the mainstream social science researcher in Ellis' textbook-novel?² The character can also be a persona, a literary re-presentation of a living person. David is using personas in his assignment; he's writing fictional interviews with Jean Clandinin and John Creswell and creating dialogue based on what they wrote in their textbooks.³

Leo: Holly, aren't you using characters in your assignment?

Holly: Oh, yeah, my poem. Okay, as you know, I teach an elementary special education class. One of my students has autism, and he likes to spit – on me, on the other students. We'd rather he didn't! So – did you want me to read my poem? It's really short.

Leo: Yeah, read it.

Holly: Okay. It's called "Attention Seeking."

A student pushes his friend,
The woman gets angry with the student.
A little boy is watching.

The little boy spits on his friend.
The woman gets angry with the boy,
The boy acts sad.

The woman is talking to her friend,
The boy spits on her coat.
The woman gets angry with the boy,
The boy acts sad.

The woman is helping a girl tie her shoe,
The boy spits on someone's head.
The woman gets angry with the boy,
The boy acts sad.

The boy holds the door for a friend,
The woman is happy with the boy.

The woman is cutting paper,
The boy spits on a girl's back.
The woman keeps cutting.

The boy tells the woman,
The woman keeps cutting.

The boy hits another boy,
The woman keeps cutting.

The boy throws the woman's hat in the garbage,
The woman keeps cutting.

The boy throws a cup at the girl,
The woman keeps cutting.

The boy spits on a book,
The woman keeps cutting.

The boy takes the hat out of the garbage,
The woman says, "Thank you" to the boy.
The boy does not spit.⁴

Leo: Wow. You aren't paid enough for what you do, Holly.

Dale: It reminds me of what it's like to teach elementary school. It captures, in a real way, what goes on in the teacher's head. Every time the poem says, "The woman keeps cutting," I realize how difficult that is. It sounds so simple. But it takes the woman *boundless* energy to do that. I felt like I was right there. Because I have had to do that myself.⁵

Leo: Do what?

Dale: When a student is overtly seeking attention through negative behaviour. I've had to decide, "How do I respond to this?"

Holly: Exactly.

Leo: How do I pretend I don't care when I'm really, really mad.

Holly: Yeah.

Natasha: I've never taught elementary school. But I found myself responding to the repetition of "the woman keeps cutting." Hearing that line over and over gave me a sense of how tenacious and patient the woman has to be when working with the boy.

¹ This fictional class is based on a narrative research study (Wiebe and Hoogland 2010) with participating students in the Winter 2009 offering of 9576 Narrative Inquiry, an online Master in Education course offered by the Faculty of Education at the University of Western Ontario, London, Ontario, Canada. All characters in the story are composites, with the exception of my Teaching Assistant persona.

² Ellis (2004, p. 339).

³ Mara (2009).

⁴ Adapted from Borden (2009, pp. 2–3).

⁵ Dale's responses to the poem, from here until the line about dry humour, are largely adapted from D. Vaandering, personal communication, October 9, 2009.

Dale and Holly: Yeah.

Natasha: [to *Holly*] Would you be comfortable with me sharing the poem with my husband? He works with teenagers with autism. He often mentions being spat upon – and slapped, and bitten, and scratched – but your poem helped me to appreciate *how* patient he has to be. How *long* his days must be sometimes.

Holly: Sure! And thank you, everyone. I don't write much poetry, and I've never written one for a graduate course before. So reading it was kind of scary.

Leo: Great job, *Holly*.

Natasha: So, tell us how the poem restories through characters.

Holly: Well, I'm not sure if this is right, but.... Okay, I was keeping – have you heard of ABC charts? They're functional observation tools, charts in which you log your observations of a student's behaviour.⁶ Anyway, I was keeping these observation charts to try to track Adam's spitting behaviour.⁷ And I also talked to his parents and other teachers⁸ about when and why it was happening. But this course assignment gave me the idea to try something else. So I took all of my notes and restoried them into the poem.

Leo: The poem summarizes your logs and field notes?

Holly: Well, yeah. It summarizes the antecedents and consequences surrounding Adam's spitting behaviour.⁸ Puts them in chronological order.

Leo: You can see how your responses to the behaviour change. In the poem, I mean.⁹

Holly: Yeah. And eventually, Adam's behaviour changes, too.¹⁰ Let me read you something from my draft assignment.... Okay, here it is:

The use of short and simple sentences in the poem allowed me to gain a better understanding and visualization of the steps Adam took to get where he is now. I was able to outline a progression from when he determined that acting out would result in him getting attention, to how he chose to act out, to my reaction to his behaviours throughout. By simply outlining the events, I was able to separate my feelings from the observation. This allowed me to look at my actions and Adam's actions in the context of where and when they took place. The form of the poem followed a specific pattern that allowed me to pinpoint the pattern in Adam's behaviours. Adam saw that students got attention when they acted out. So, he chose to act out in order to get the attention. I documented my findings, and I created a poem to help me reveal a pattern in Adam's behaviours.¹¹

Dale: Yeah, the poem is very methodo, methodological – is that the right word? No, *methodical*. You know, my first reaction was, "It's right on." But when I thought about it some more, I thought . . . well, the emotion is removed from the poem.

Holly: [Apprehensively] What do you mean?

Dale: Well, it's all in passive voice, recording voice.

Natasha: "The boy acts sad" instead of, say, "the boy cries." "The woman gets angry" instead of "The woman speaks loudly."

Leo: Or "The woman yells."

Holly: Is that bad?

Dale: Noooo.... It's almost – like dry humour. . .

Leo: The poem really understates an intense situation.

Dale: Yeah.

Leo: And the poems we've looked at in this class all try to recreate situations in such a way that the reader can feel it, you know, to make you *feel* the intensity of the teacher's frustration.¹²

Holly: O . . . kay.... But I wanted to remove myself from the intensity. I wanted to reveal the pattern in Adam's behaviours through the poem. For me and the others who work with him.¹³

Natasha: That's one of the things I find interesting about the poem. You can tell from our initial responses that we found the poem compelling. The poem evoked a sense of frustration for us, despite its understatement and its use of passive voice. Yet, at the same time, writing the poem also helped you take a step back and see a pattern in Adam's behaviour, right?

Holly: Yeah.

Leo: I like that. The poem was an emotional listening experience, even though *Holly* deliberately wrote it in an unemotional way.

Dale: *Holly*, I want to know – is Adam still spitting?

Holly: Oh *yeah*. But I still need to talk to my colleagues about the pattern I've found. I mean, I just wrote the assignment. Maybe we can figure out how to minimize the spitting.¹⁴

Natasha: So, let's bring out the restorying part here. *Holly*, you said that you recorded Adam's spitting episodes in your observation charts.

Holly: And my conversations with his parents and other teachers. I recorded those in field notes, too. Then I restoried those spitting episodes and observations into a poem.

⁶ Borden (2009, pp. 7–9).

⁷ Ibid., p. 15.

⁸ Ibid..

⁹ Ibid., p. 13.

¹⁰ Ibid..

¹¹ Ibid., p. 15.

¹² See Johncox et al. (2009), another fictional story based on student writing in the Winter 2009 offering of 9576 Narrative Inquiry.

¹³ See Borden (2009, p. 15).

¹⁴ See Borden, p. 15.

Natasha: And that poem features the interactions between two personas, the woman and the boy. Why did you use “the woman” and “the boy” instead of “I” and “Adam”? Later in your assignment you mention Adam by name, right?

Holly: Well, Adam isn’t his real name, but you’re right, I do use that name later in the assignment. Um... I don’t know! [*embarrassed*]

Dale: Well, earlier you said [*looks at his notes*] that just outlining the events in the poem helped you to separate your feelings from the observation. Do you think using “the woman” and “the boy” helped give you some distance, too?

Holly: Ohhhhh.... I hadn’t thought of that! [*Scribbles notes.*]

Natasha: Can restorying through a character help to move the researcher from the heat of the moment, from deep involvement with a particular experience, to a state of “cool observation”?¹⁵

The above story demonstrates some benefits of using fictional characters in narrative research writing. First, Holly’s experience suggests that restorying field texts through fictional characters can help the researcher move away from deep involvement with a particular experience to a more removed perspective that allows the researcher to see the experience with fresh eyes (see Hoogland and Wiebe 2010). Second, the story models different ways in which the researcher can use fictional characters to re-present themes in his or her field texts: (a) Holly distills behavioural patterns noted in her field texts into a poem driven by the interaction of two characters; and (b) I re-present some questions and perspectives expressed in my field texts into a story that takes the form of a fictional dialogue. Third, the story demonstrates that writing fictional characters can be compelling for one’s audience. Dale, Leo, and Natasha are moved by Holly’s poem; the experience re-presented in the poem resonates with them, or helps them to appreciate what it must be like to work with a child with autism. In these ways, the story demonstrates some possibilities of using fictional characters in narrative research writing. At the same time, the dialogue also embodies some constraints of such writing. These include the challenge of writing scholarly fiction *well*. If Leo and Dale had been presented with the rest of Holly’s draft assignment, which was written in conversational social science prose, they would have likely provided some concrete suggestions for revision, such as suggesting ways that Holly could improve the fit between her thesis statement and literature review. Like many graduate students living in the real world, the fictional Leo and Dale have spent years learning to read and write expository and argumentative prose, but they have had much fewer

opportunities to learn to read and write in storied ways. Leo and Dale may be unaware of how to help Holly refine her poem. As Leavy (2009) writes,

poetry is a complex artistic craft with its own set of normative practices and literary rules. It is therefore a mistake for researchers to assume they can write poems, or do so easily, simply because they want to ‘experiment’ with the form without paying attention to craft in its own right. Rather, researchers embarking on a poetic project need to study the tradition of poetry.... (p. 82)

Writing fiction is a craft, too, and one for which I suspect many educational researchers are not well prepared. The faculty and peer reviewers of my doctoral thesis, in which the above story and others appeared, were generous and helpful in their comments; at the same time, they generally did not offer feedback on the creative, imaginative pieces. Perhaps they were unsure about how to help me hone my stories so that, for example, the dialogue was less artificial and the characters’ voices were more distinct. This possibility seems likely to me when I consider that the social-science research conferences I have attended have included comparatively few presentations of scholarly fiction or other creative, imaginative forms of re-presentation, and that the *APA Manual* (2010), the style handbook of choice for many educational researchers, explicitly discourages literary writing, as such writing “might confuse or disturb readers of scientific prose” (p. 65). While growing in practice, scholarly fiction remains a new frontier for many educational researchers. As Leggo and Sameshima’s chapter and this vignette suggests, it is also an exciting and promising exploration.

Note on Contributor

Dr. Natasha G. Wiebe is a freelance editor who lives in Windsor, Ontario, Canada with her family, two cats, three guitars, an electric piano, and hundreds of books. Her publications include interviews in *Conrad Grebel Review* and *Prairie Fire*, poetry in *Rhubarb: A Magazine of New Mennonite Art & Writing*, and articles in *Journal of Mennonite Studies* and *Forum: Qualitative Social Research*, and a chapter in *German Diasporic Experiences*. Natasha conceived of, and helped develop, the University of Western Ontario’s Narrative Inquiry in Education portal at www.narrativeinquiry.ca.

References

- American Psychological Association (2010) Publication manual of the American Psychological Association, 6th edn. APA, Washington, DC
- Borden L (2009) Using poetry to help understand one child’s behaviours. Assignment submitted for 9576 Narrative Inquiry, Faculty of Education, University of Western Ontario, London

¹⁵ Clandinin and Connelly (2000, p. 81).

- Clandinin DJ, Connelly FM (2000) *Narrative inquiry: experience and story in qualitative research*. Jossey-Bass Inc., San Francisco
- Ellis C (2004) *The ethnographic I: a methodological novel about autoethnography*. Rowman & Littlefield Publishers, Inc., Walnut Creek
- Hoogland C, Wiebe NG (2010) Nomi Nickel and Little Red Riding Hood: the potential of using fictional characters in narrative research. Paper presented at the Faculty Seminar Series, University of Western Ontario, Faculty of Education, London. Retrieved from <http://www.narrativeinquiry.ca/readings.html>
- Johncox D, Wiebe NG, Hoogland C (2009) Kusserow re-written: exploring the educational research potential of storied poems. In: Hoogland C, Wiebe N (eds) *Narrative inquiry in education*. Retrieved from <http://www.narrativeinquiry.ca/faq.html#Q6>
- Leavy P (2009) *Method meets art: arts-based research practice*. Guilford Press, New York
- Mara D (2009) *Interviewing texts: fiction writing as method of inquiry*. Assignment submitted for 9576 Narrative Inquiry, Faculty of Education, University of Western Ontario. Retrieved from <http://www.narrativeinquiry.ca/faq.html#Q11>
- Wiebe NG (2010) *Restorying in Canadian Mennonite writing: implications for narrative inquiry*. Doctoral dissertation, Faculty of Education, University of Western Ontario, London
- Wiebe NG, Hoogland C (2010) Nomi Nickel and Little Red Riding Hood: the potential of using fictional characters in narrative research writing. Paper presented at the international Narrative Matters conference, Fredericton

John J. Guiney Yallop

Abstract

“Echoes never die,” I write in this vignette. “Once heard, they keep repeating across space and across time.” Sharing some of my own echoes that haunt me, even after many years of success as an educator and as a writer, and now, after some years as an academic, I describe how I have learned, and am still learning, to talk back to the echoes. My writing is research. Fictionalized narratives and lived experiences become the field for my data. I engage in poetic explorations, and create poetic renderings, of place and memory, of identities and communities, of emotional landscapes. I invite readers into journeys of loss, of recovery, of forgiveness, and, ultimately, of gratitude.

Keywords

Poetic inquiry • Place • Memory • Identities • Communities

Echo Stories

I might write a story, or a few stories. But, what if it's not a good story, if they're not good stories — what if I don't get it right? Carl Leggo wrote somewhere, perhaps more than once, that he was always (or was that often?) insecure. (Should I find that article and quote him exactly? Would that be more academic? What if people now think that I'm a lazy academic, because I haven't searched for that exact quote, or, worse perhaps, that I'm not an academic at all — not good enough to be one?) Now, there's an echo — not good enough. I've heard that before, haven't I? I'm hearing it again. I'm always hearing it. Why? Why is it that no matter how much success I accumulate around me, I'm not good enough? Why is it that no matter how many people tell me otherwise, I keep hearing the same echoes? I'm not good enough. I won't be able to do it. Rhetorical questions? Echoes never die. Once heard, they keep repeating across space and across time. I've learned, am learning still, to talk back to the echoes. Is that what Carl and Pauline are doing in

their chapter? Are they talking back to their echoes? Each others? Mine? Ours? Is that what we all need to do as researchers who use so-called “unconventional” approaches to research?

In regards to fiction, I'm often asked about my own poetic work: Did that really happen? What is that one about? Is that about so-and-so or such-and-such? Most often, unless I forget myself, I reply, “What is it for you? What it is saying to you?” Yes, unless I forget myself. Sometimes, I forget myself. It's not amnesia, as such; I can say my name, date and place of birth — give lots of factual information. It is not who I am that I forget; it's what I am. I forget I'm a writer, a poet, a storyteller, a performer. It happens only sometimes — not often — but when it does, the echoes become even louder and steadier. Those echoes: I'm not good enough. I won't be able to do it. And then I keep writing. I keep speaking. I keep writing and speaking back. To not write, to not speak, back to the echoes — to be swallowed up in silence — is to die. Or worse, I think, it is to merely exist in the shadows of the echoes.

Sometimes, I have to go back behind the echoes. I have to go back before the echoes. I have to go back past schooling with its controls — where writing was in lines and rows, and where speaking was polite and not disruptive. And, I was

J.J.G. Yallop (✉)
School of Education, Acadia University, Wolfville, NS, Canada
e-mail: johnj.guineyyallop@acadiau.ca

good at all of that. And, I'm still good at it; I can still "just please," although my partner tells me that in the 25 years of our relationship, he has never seen me do it. I have to go back past the priests' warnings and threats, warnings and threats that frightened me, that frighten me still, although my daughter believes that I'm afraid of nothing and nobody. (Those are their fictions; sometimes, I live by them.) To go back behind or before the echoes, I have to go back to the smell of burning wood in our second kitchen, a kind of porch built onto our house, where my father would tell us stories before bedtime and my mother would knit wool socks and mitts for the winter. Sometimes there would be no words — just bread and molasses with tea. Or, I have to go back to another kitchen in another house in the same small outport community on the east coast of Newfoundland — a kitchen where the smell of burning wood mixed with pipe smoke, and where two old men, brothers, told stories that made me afraid when later I walked home in the dark. But, it was a beautiful fear, a fear I wrapped myself in, a fear of faeries and spirits.

I have discovered that my research is both a process of writing and speaking back to the echoes, as well as a journey behind or back past the echoes to the love and community I experienced in my childhood. In my research, I do not attempt to recapture or relive my childhood, or to escape into memories, and when I fictionalize those memories of that childhood, I am not escaping from reality. Of course, I realize that those are critiques of my research, critiques I disagree with. In response to those critiques I say that I cannot relive anything, and I'm not interested in escaping to or from anything, except perhaps to the freedom to make my own decisions about my own research, and to a place where it is possible to create that environment for others, and from the constraints of routine and from the imprisonment that comes with "just pleasing." No, my research is not, and is not an attempt at, recapturing, reliving, or escaping. It is, however, imagining. It is a deliberate use of the imagination to bring myself and my audiences into the experiences I am writing. And it is a creation, even a creation of a reality, a bringing of a reality into being through the imagination (Guiney Yallop 2005, 2008, 2009a, b, 2010a, b; Day and Guiney Yallop 2009).

Home

The house I grew up in
 was rolled on logs up the road from Island Cove
 to our lane, called Harvey's Lane, named after my
 grandparents
 who used to live at the end of the lane
 until they moved to their new house
 up on the hill behind the Admiral's Cove school
 and church.
 Our house was small,
 I was told,
 but by the time I was born
 it had grown another room
 and a porch.
 Outside was the stable

and the henhouse
 and the cellar.
 Up the hill behind our house was the well;
 there was another one across the road
 for when the one up the hill went dry.
 I can remember when the second kitchen was built on.
 Walking through the ashes the day after the fire,
 smoke rose in spots around my legs—
 memories reaching for me.
 Burnt to the ground.
 Flattened by fire.
 Nothing seems to describe the loss of home,
 except, perhaps,
 how we remember.

Novels and Autobiographies

Sometimes, on one of the first inside pages of a novel, or of a collection of narrative poems, we're told that all of the characters contained in the work are purely fictitious and any resemblance to real persons is purely coincidental. I have yet to read (or meet) a purely fictitious person, and I don't know how coincidences can be pure.

Recently, a teacher told me about asking students to write their autobiographies. The two main criteria given were that everything in the autobiographies had to be true (because that's what autobiographies are) and that nothing could be too personal (because some writing belonged only in personal journals). A dilemma arose when one student, with same-sex parents and no siblings, made the decision to write an autobiography that included living with a mom and a dad, as well as having a brother and a sister. What to do? Insist on a rewrite of someone else's autobiography? I suggest that it might be the school culture, or, more precisely, the culture of schooling, that needs to be changed rather than the child's autobiography. And, which was the real fiction anyway, the child's writing or the story of the safe school?

My own autobiographies are poetic and are, at least in one regard, like novels — constructed. Just over a year ago the construction of my autobiographies was challenged — again. I had to begin rewriting my stories — my body. I discovered, at age 50, that my maternal grandmother was Aboriginal. While I embraced this new knowledge with a writer's, a poet's, a storyteller's, a performer's — a researcher's — glee, I was also saddened by the reminder that so many of our individual and collective stories in outport Newfoundland were not valued by the institutions that held so much power, and many stories may have been lost because the stories that were valued, or even tolerated, by the educational and religious institutions, were stories from offshore. Inshore and local stories were told in kitchens, when they were told at all — when they weren't silenced completely. I am going back, physically and imaginatively, to those kitchens. I have begun a process of telling

my grandmother's stories, of finding them, of writing them in poetry, of performing them, of imagining them — of creating them. These gifts from my grandmother are finding their way into my body and into my research.

First Letter to My Grandmother Harvey

Grandma,
where are you?
What have you brought
to me?
How long have you been waiting
to give me this gift?—
a new identity
to explore,
to embrace,
to know
myself,
and others,
through.

Second Letter to My Grandmother Harvey

Grandma:
How often did you hold me?
How closely?
Do you hold me still?
Were you frail when I was born?
Were your ancient fingers
squeezed
in my newborn hands?
Are they still?
Did your lips touch my forehead? my cheeks?
Do they still?
Did you rock me in some old rocking chair?
Do you rock me still?
Did your face smile over mine?
Does it still?
Did I hear your voice?
I hear it now,
whispering who I am.

We Need Our Mentors. We Also Need to Choose Them. Sometimes They Choose Us

In completing my doctoral research (Guiney Yallop 2008), I turned to the writings of Carl Leggo (1994, 2001, 2004, 2005) as both a support and a guide in my journey. Since completing my doctoral studies, I have shared Pauline Sameshima's (2007) work with graduate students seeking support and guidance in creating their own journeys. Throughout my graduate studies, and into my academic career, other mentors have also offered me much in my writing journeys, and I, in turn, have shared their work with students. Carmen Shields (1997) helped me deepen my understanding of narrative inquiry during my Master of Education. I met, first in their writing through a course in my doctoral program, and later in person, Carolyn Ellis and Arthur Bochner (2000), as well as Laurel Richardson (2000). The work of those three scholars was both a reminder and a permission to write from and about my own experiences. Cornelia Hoogland (1996, 2001, 2003, 2005) was my doctoral studies supervisor. Cornelia encouraged

and supported the recovery of my poetic voice. Monica Prendergast (2007) guided me to a community of support for that voice. Rebecca Luce-Kapler (1999, 2004) gave me access to a language that strengthened my artistic/poetic voice. Lorri Neilsen (2004; Neilsen Glenn 2007) reminded me to pay particular attention to the ongoing development of that voice.

Mentors come in and out of our lives — we bring them in and out; some stay, some leave, and some return. Carl and Pauline's chapter in this book offers mentorship for those who are using fiction as research, and who are seeking such mentorship. If we are startled by their writing, we may wish to be grateful both that we have the capacity to be startled and that someone dares to startle. If we agree or disagree with what they write, we may choose to enter the conversation their writing invites us into. As we enter, we are certainly welcome to bring and share our own stories — individual and collective. We all become better as a result of this sharing.

Note on Contributor

John J. Guiney Yallop is a parent, a partner, and a poet. He is also an Associate Professor in the School of Education at Acadia University. John lives in Wolfville, Nova Scotia, Canada with his partner, Gary, their daughter, Brittany, and their pets, Izzie (the dog) and Whisker and Woodly (the cats).

References

- Day L, Guiney Yallop JJ (2009) Learning, teaching, and researching through poetry: a shared journey. *Creat Approaches Res* 2(2): 46–57. Online: <http://www.rmitpublishing.com.au/car.html>
- Ellis C, Bochner AP (2000) Autoethnography, personal narrative, reflexivity: researcher as subject. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*. Sage Publications, Thousand Oaks, pp 733–768
- Guiney Yallop JJ (2005) Exploring an emotional landscape: becoming a researcher by awakening the poet. *Brock Edu* 14(2):132–144
- Guiney Yallop JJ (2008) Out of place: a poetic journey through the emotional landscape of a gay person's identities within/without communities. Unpublished doctoral dissertation, University of Western Ontario, London
- Guiney Yallop JJ (2009a) Being a poetic researcher: holding the tension of artist in the academy and academic in the world. *Int J Arts Soc* 4:1–10. Online: <http://www.arts-journal.com>
- Guiney Yallop JJ (2009b) My daughter is going to school: how a queer catholic is learning again to pray. In: Prendergast M, Leggo C, Sameshima P (eds) *Poetic inquiry: vibrant voices in the social sciences*. Sense, Rotterdam
- Guiney Yallop JJ (2010a) *Notes to my prostate*. Sixth Floor Press, Toronto
- Guiney Yallop JJ (2010b) *Of place and memory: a poetic journey*. Backalong Books, Halifax
- Hoogland C (1996) The geography of consciousness: the Dutch immigrants' daughter as artist. *J Can Soc Educ Art* 27(2):14–21
- Hoogland C (2001) *You are home*. Black Moss Press, Windsor
- Hoogland C (2003) *Cuba journal: language and writing*. Black Moss Press, Windsor
- Hoogland C (2005) *Second marriage*. Canadian Poetry Association/London Chapter Publishers, London

- Leggo C (1994) Growing up perpendicular on the side of a hill. Killick Press, St. John's
- Leggo C (2001) Research as poetic rumination: twenty-six ways of listening to light. In: Neilsen L, Cole AL, Knowles JG (eds) *The art of writing inquiry*. Backalong Books, Halifax, pp 173–195
- Leggo C (2004) Living poetry: five ruminations. *language and literacy: A Canadian Educational E-Journal [On-line]* 6(2): [unpaginated] Available at <http://www.langandlit.ualberta.ca>
- Leggo C (2005) Pedagogy of the heart: ruminations on living poetically. *J Educ Thought* 39(2):175–195
- Luce-Kapler R (1999) White chickens, wild swings, and winter nights. *Lang Arts* 76(4):298–304
- Luce-Kapler R (2004) *Writing with, through, and beyond the text: an ecology of language*. Lawrence Erlbaum Associates, Mahwah
- Neilsen L (2004) Aesthetics and knowing: ephemeral principles for a groundless theory. In: Cole AL, Neilsen L, Knowles JG, Luciani TTC (eds) *Provoked by art: theorizing arts-informed research*. Backalong Books, Halifax, pp 44–49
- Neilsen Glenn L (2007) *Combustion*. Brick Books, London
- Prendergast M (2007) *Poetic inquiry: an annotated bibliography*. University of British Columbia/Centre for Cross-Faculty Inquiry, Vancouver
- Richardson L (2000) Writing: a method of inquiry. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*. Sage Publications, Thousand Oaks, pp 923–948
- Sameshima P (2007) *Seeing red — a pedagogy of parallax: an epistolary bildungsroman on artful scholarly inquiry*. Cambria Press, Amherst
- Shields C (1997) *Behind objective description: special education and the reality of lived experience*. Unpublished doctoral thesis, Ontario Institute for Studies in Education of the University of Toronto

Lisa Korteweg

Abstract

Digital media and online communication have become a pervasive part of the everyday lives of youth and most graduate students. Web 2.0 technologies such as social network sites, online video games, content-sharing sites, and YouTube are now well-established fixtures of communication and knowledge exchange. While wary of the claims that there is a digital or Web 2.0 generation that overthrows knowledge generation and representation as currently practiced in graduate programs, I argue that the current adoption of Web 2.0 social media is accelerating a unique period of knowledge exchange, content generation and digital representations in research. How are representations 1.0, 2.0 and 3.0 being taken up by researchers and what opportunities do these new digital practices afford? And how do these representational practices change the dynamics of research and scholarly communication? The extent to which new digital technologies can mediate representations of research should call the educational research community, graduate departments and thesis committees to epistemological and methodological attention, creative responses, and serious inquiry. The chapter begins a critical study into issues of representations of educational research through new digital technologies and issues to ponder in digital research design decisions. The goal is to learn how to harness the opportunities that increasing digital fluency presents, and shape our research in ways that advance a more creative participatory culture in educational research.

Keywords

Representations • Digital research • Web 2.0 • Scholarly communication • Open access

Introduction

In this chapter, I champion the idea that education research can regain relevance, vigor and perspective by drawing upon the energies and complex forces of change of Web 2.0 tools, social networking and creative collaboration. I consider seriously the call by Windschitl (1998) to transform qualitative research methods in light of new Internet and digital tools as well as Greenhow et al.'s (2009) call to transform scholarship to leverage and illuminate the impacts and uses of Web

2.0 tools for collaborating on, creating, and communicating educational research. I encourage new researchers to usher in 'Research 2.0' and to be a force of change in transforming the representations and dissemination of educational knowledge. In this era of Web 2.0, central goals of educational research need to include transparency, openness, freedom and authentication in the pursuit of educational inquiry in and for public engagement and interest. In this chapter, then, I outline an approach to educational inquiry and research representations that responds to and pushes forward an expansive view of public dialogue, public relevance and public engagement in knowledge exchange, focused on questions such as: What public interests or aims can education research serve in this Web 2.0 era? What forms of

L. Korteweg (✉)
Faculty of Education, Lakehead University, Thunder Bay, ON, Canada
e-mail: lkortewe@lakeheadu.ca.

inquiry and representation might encourage researchers and the public to become more creative and collaborative problem-solvers in Web 2.0? How can this transformation be assisted by thinking through research in Web 1.0, 2.0 and 3.0 while inquiring into corresponding representations that can be conceptualized as representations 1.0, 2.0 and 3.0? Before research and representations 1.0, 2.0 and 3.0 can be pursued, the characteristics of these terms — Web 1.0, 2.0 and 3.0 — need to be defined in order to contextualize research embedded or stemming from these uses and conditions of the Internet.

Emergent Webs of the Terms 1.0, 2.0 and 3.0

When researchers use terms such as “Web 2.0,” they are reaching for language to describe something that is not yet understood or well researched. This has been a perennial problem with Internet and emergent technologies. The fuzziness or buzz effect of technological terms needs to be tolerated because researchers do not want to freeze the effects or hinder the language of these tools by boxing them in with pre-determined concepts. In this chapter, I examine and play on webs of meanings stemming from the terms and suffixes 1.0, 2.0 and 3.0 (see Landow’s (1997) *Hypertext 2.0*) in order to describe a malleable and unstable moment in the history of research representations.

The term Web 1.0 refers to the first-generation Internet of the last 10 years, a web space that has been primarily used and understood as an information repository or archived text set or bulletin board space (Cormode and Krishnamurthy 2008). In Web 1.0, users could access content in a manner that resembled a type of virtual library where the content is authored by established (published) “experts” with credentials in the topic or field (Wallace 2004). The boundary between Web 1.0 and Web 2.0 is the ability of the “average” user in Web 2.0 to post content of their own making or creation. Conceptually and epistemologically, Web 1.0’s design, purpose, and processes embodied a traditional stance where knowledge is determined by “experts with substantial credentials in academic fields and disciplines” (Dede 2008a, p. 80). Web 1.0 acquired content hierarchically from the relatively few who had established stature or status in their analog fields and who then served as the primary providers or authors of content on the Internet.

As Internet access expanded, the Web developed into Web 2.0: a space of new social domains, open content provision and multi-modes of peer-to-peer communication, previously unavailable in Web 1.0, except to HTML programmers. Beginning as a marketing term by O’Reilly (2005), Web 2.0 is an expression of ideas, behaviours, technologies and ideals all at the same time (Allen 2008). Precise distinctions between Web 1.0 and Web 2.0 are

elusive and emergent because, in practice, technologies evolve over time, with newer iterations hatching from previous ones and some sites characterized by a blend of Web 1.0 and Web 2.0 features (Cormode and Krishnamurthy 2008).

Web 2.0 is commonly understood as a term that signifies an Internet of sociable technologies and social software that enable education and research, for organizations, educators, students and laypersons. These tools include: social networking services, such as MySpace, Twitter and Facebook; collaborative filtering and content management such as RSS (Really Simple Syndication) feeds; social bookmarking, such as Delicious and CiteULike; social search engines, file sharing and tagging sites, such as YouTube and Flickr; instant messaging or micro-blogs, such as Twitter; and, online massive multi-player games such as Second Life, Quest Atlantis, and World of Warcraft. The most popular Web 2.0 applications, namely wikis, blogs and podcasts, are but the tip of the social software iceberg.

Web 2.0 is both a platform for social tools and a progressive information space where users have become “producers” (Bruns 2008), that is, users who are as important as the content they upload and share with others (Cormode and Krishnamurthy 2008). Web 2.0, Dede noted, is “centered around Web-based communities, where the central theme is to facilitate creativity, collaboration, and sharing” (Dede 2008b, p. 4). It is an environment where knowledge is gained through bottom-up, collective methods, rather than top-down, individual, traditional forms. “Web 2.0,” Dede states, “is a major paradigm shift in the way people think” (Dede 2008b, p. 4) or a “seismic shift in epistemology” (Dede 2008a, p. 80).

Where Web 1.0’s contribution was to permit researchers to post and make their research available to users/visitors to read, I argue that Web 2.0 positively encourages the world of research “to see more and more openness with regard to the social consequences of what we do, more and more clarity about our public purposes” (Miller 2000, p. 254). For example, publishing on Web 2.0 in multiple formats (multi-modal), rather than simply typed staid text affords researchers the means to face and challenge ongoing stereotypical and obfuscated portrayals of schooling and education in popular media such as news clips, television and movies (Woo 2008). Education researchers now have the means to make educational research a richer, three-dimensional endeavor rather than simply two-dimensional text data or representations of participants without (literally) audible voices.

Conceptually, Web 2.0 seems to embody “knowledge” as “collective agreement” that “may combine facts with other dimensions of human experience, such as opinions, values, and spiritual beliefs” (Dede 2008a, p. 80). Validity of knowledge in Web 2.0 environments is established through peer-to-peer review in an invested and engaged community, and

expertise entails understanding disputes and offering syntheses widely accepted by the insider-producer community (Dede 2008b). In other words, knowledge is decentralized, accessible, and co-constructed by and among a broad base of users.

At this particular historical moment of the Internet, youth, particularly those aged 12–25, are engaging in Web 2.0 to such an extent that their analog school and leisure lives often take second place to their Web 2.0 expressions, identity creation and online projection (boyd 2008; Lenhart and Madden 2005; Lenhart et al. 2007, 2008). What this means for researchers, especially educational researchers, is that many of their research subjects now inhabit a social world of Web 2.0; thus, the research may reside and be best disseminated in this multimodal media form. New researchers may qualify as members of the digital generation themselves or already participate and understand the world of Web 2.0 in their own leisure time, but these social networking skills and ability to conduct research 2.0 may not be recognized as such in their graduate programs. As often is the case with new technologies for data capturing or communication, there is an unstable and uncertain period of adaptation by institutions (Murthy 2008; Willinsky 2004). Many universities remain focused on a “traditional” view of data, research, and communication (Dede 2008a, 2009; Tapscott 2009) and there are faculties of graduate studies that may not yet be ready to acknowledge research 2.0 as legitimate doctoral scholarship (see Barrett 2013).

One central problem for the university as an institution is that the social space of Web 2.0 resembles *flatland* (Banchoff 1994; Lather 2008): a world of scarce hierarchies, standards or filters to determine what information counts as knowledge and who determines what counts as legitimate research. Web 2.0 positions users of the Internet, both large (famous) and small (anonymous), as relatively equal and unsituated participants (Senft 2009). Indeed, Web 2.0 is a space where producers can become micro-celebrities, the phenomenon of being closely followed by a small group of dedicated users; micro-celebrity status depends more on daily closeness and familiarity rather than expertise and professional distance from the reader (Thompson 2007; Senft 2009).

This type of flat, “everything goes” digital space is in stark contrast to the specialized narrowly defined research space of universities. Given how transitory and emergent the Internet is as a communication and knowledge space, the ongoing movement of the Web towards a social space cannot be predicted or pre-determined. Web 3.0 is a rhetorical strategy in this chapter to keep the reader tuned and attentive to the malleability of most discussions concerned with research and representations. What research 3.0, hypothetically named, needs is an ongoing institutional conversation about what accreditation processes can respond to these technological innovations and what knowledge

and representations count in the ongoing transformative processes of digital research and digital publication.

Public Engagement in Education Research

Willinsky (2004, 2006, 2013) has persuasively argued that all social research, including educational research, needs its public audience, a readership to engender dialogue that spans beyond a relatively few academic readers in journals or at conferences in order to be in motion, dynamic, expansive, engaging, and democratic. Said (1994) argued that a researcher must strive to become “an individual endowed with a faculty for representing, embodying, articulating a message, a view, an attitude, philosophy or opinion *to, as well as for, a public*” (p. 11, *emphasis mine*). For Said, “this role has an edge to it,” for the intellectual must recognize the necessity of opening spaces “to raise embarrassing questions, to confront orthodoxy and dogma (rather than to re/produce them), to be someone who cannot easily be co-opted by governments or corporations, and whose *raison d’être* is to represent all those people and issues that are routinely forgotten or swept under the rug” (p. 12).

Said (1994) and others concerned with the public purpose of research and the identity of the public intellectual (for example, Barone 2006; Greenhow et al. 2009; Willinsky 2002) recommend that we remember one key reason many of us become scholars: to enable others, the public, to know and live more freely and meaningfully. This principle, however, can be lost or obscured by institutional calls for discipline-based publication and standardized inquiry that sometimes weighs upon new scholars as they struggle to find and define their research passion (Woo 2008). In examining a social justice purpose in research, Ayers (2006) poses one guidepost question: “How can the public space for discussion, problem posing, and problem solving be expanded?” (p. 85). One answer to Ayers’ critical question resides in the conceptualization, adoption and expansion of Web 2.0 in educational research. The Internet as Web 2.0 has indeed become a more public realm for engaging sets of tools and social spaces for discussion, problem-posing and collaborative problem-solving.

Every researcher, new and experienced, needs to think through the perennially important questions of the (public) purposes of their research in the manner that Ayers asks: What does one want to represent in the research? To whom or for which audience? For what purposes? Toward what end, and in the interest of what social group or order? In the era of Web 2.0, these questions take an interesting turn by morphing into questions such as: what does the educational researcher want to co-create or co-construct through digital representations (representations 2.0)? How open and malleable will the researcher make the research for the user/visitor

and toward what ends or purposes? What social groups does the researcher expect to engage in the research/representations 2.0? Or, which social orders does the research expect to reproduce, deconstruct or counter through these immersive multimodal representations? And, how do education researchers imagine their audience, the new Public 2.0, when making choices about research representations?

These questions are urgent. While there is much potential and certainly hype about the impact of Web 2.0, there is a deep need for sustained inquiry and exploration as to what this new expanded mode of communication and design of research with the public means for the accreditation process of the universities (the minting of PhDs, promotion, and tenure procedures). Graduate researchers may be struck by how underdeveloped academic and institutional frameworks currently are for analyzing, legitimating and valuing new digital media and Web 2.0 technologies in educational research (e.g., Korteweg 2007). They also need to be cognizant of the current tendency in universities, including in graduate programs, to undervalue or misunderstand digital research and digital representations of research (Jaschik 2009) or research/representations 2.0.

Lather's Praxis 1.0, 2.0, and 3.0

Taking the call and metaphor of Web 2.0 seriously in educational research, Lather (2007, 2008) describes three eras of praxis in the field of critical pedagogy: 1.0, 2.0 and 3.0. Her use of the 1.0, 2.0 and 3.0 metaphors offers a model of how to conceptualize the historical moment. Lather's distinctions between praxis 1.0, 2.0 and 3.0 provide a discursive model to think through and distinguish between the hype and the potential of research 1.0, 2.0 and 3.0 in education. She begins with Praxis 1.0 as the theoretical-historical moment in critical pedagogy inspired by the work of Freire (1970/2000) when researchers embraced a liberatory approach to work with marginalized groups. The challenges of such attempts by Western scholars to "rescue" or "emancipate" the oppressed at the margins have now been long acknowledged. In the second era of critical pedagogy, Praxis 2.0, a multitude of voices from the margins articulated their own situated perspectives and claimed space within academic discourse. In this era, various collectives have worked hard to advocate for the validity of their own unique epistemologies. According to some theorists, the Praxis 2.0 era also had the effect of flattening out academic discourse through a multiplicity of competing, even contradictory ideas, all weighed as equally valid (Gitlin 2002; Lather 2007).

Lather (2008) suggests that we are now approaching a third era, Praxis 3.0, which she terms "the post-critical or

post-enlightenment era." In order to move into other ways of knowing, researchers need to embrace the possibility of "not knowing" rather than being so certain of the validity of our own situated knowledges and praxis. Our ability to think in a certain way is only possible when another way of thinking has been left out, thus Lather recommends that we consider the history that has enabled our own way of thinking through the critical self-examination process of Praxis 3.0. With the advent of Web 2.0, certain hierarchical conditions of publication and legitimation of knowledge have blurred or receded as amateurs become the producers of information or 'producers', resulting in online "mass amateurization" (Shirky 2002, 2008). The problems of Web 2.0 amateurization grow as the world's information is rapidly being put into the single rhizomatic network of the Internet. As the traditional publication hierarchical triangle is turned on its head, valued information is no longer derived from those whose expertise is validated through sole-authored academic writing. Instead, Web 2.0 content is being driven by technology designers or programmers focusing on access devices, multimodal portals or layered tools in ways similar to Google News (challenging major newspapers such as the *New York Times*), Google Scholar (challenging citations indexes such as Web of Science), Google Books (challenging many book publishers), Fora.TV (challenging educational TV networks), or Kindlebook handhelds. Knowledge or content now becomes valuable when it becomes accessible immediate knowledge in the public realm and responsive to public additions and reviews.

To think through these flat, non-hierarchical problems in research 2.0, particularly for doctoral certification, the idea of representations 3.0 could help stretch institutional thinking and generate institutional dialogue on the state of academic publishing. Neilsen (2009) describes a space of publication where recognized researchers create original content for their blogs or video-blogs, multimodal or multi-dimensional content that in many cases would be difficult or impossible to publish in conventional journals. This could be content that is perceived to need immediate circulation or peer review rather than waiting on the typical 1–3 year publication cycle. An increasing number of scientists are engaging in publication on Web 2.0 that circumvents conventional academic publishing, especially through science blogs, a serious medium for research content and outreach (Neilsen 2009).

Representations 1.0, 2.0, 3.0

Representations produce a version of an empirical situation, a version of the research rather than the actual research event itself (Schwandt 2007). Representations are often constructed as texts or language that offer an account of the

research. In research/representation 1.0, analog language, usually typed on a page, is the communication device of the representation and constructs the research (Rosenau 1992). Denzin and Lincoln (2005) describe how the textual practices of qualitative research transform the world into a series of representations such as field notes, interviews, and conversations. But what happens when research is captured and created *in situ* through devices such as video, image, sound and music communicated through a Web 2.0 environment? What is the impact on representations when they are no longer text-bound, sole-author-bound or space-bound?

In the histories of the social sciences, research is littered with linguistic turns, aporias and lately the crises of representation (Denzin and Lincoln 2005; Marcus and Fischer 1999). Denzin and Lincoln (2005) refer to the “4th moment” of the crisis of representation as the point where scholars began to question how to produce texts that refuse to be read in simplistic, linear, incontrovertible terms. One response to the crisis is to consider researchers to be “bricoleurs” (Denzin and Lincoln 2005, p. 6; see also Levi-Strauss 1968) who have learned how to borrow from many different disciplines and “blur genres” (p. 17). In representations 2.0, researchers can be explicitly bricoleurs, using a wide variety of tools (wikis, blogs, social bookmarking, video/YouTube clips, etc.), and invite users to engage in their work as co-bricoleurs. In representation 2.0, the non-linear, multimodal (particularly visual), immersive and hypertext tend to dominate. Visitors expect some interactivity, such as ways to add their own comments, suggestions and links. As visitors have the opportunity to co-author and collaborate more than any print medium could permit, there can be a blurring of boundaries between authors, users, researcher texts and audiences.

I contend that we are now on the cusp of another crisis of representation: the growing gap between the tools of representation available to new scholars (representations 2.0) and the forms of representation (representations 1.0) generally understood to be standard practice for academic publishing (one-dimensional dissertations and linear text-based articles). The discipline may also be on the cusp of a growing gap between constructions of academic identities, that is, between the professional academic and the public intellectual.

The public intellectual could be someone who wants more voices to be heard in education research and more public engagement in research. A preference for representations 2.0 could be connected to the scholar’s feelings of obligation and responsibility to multiple publics, ranging from students to parents, from media audiences to policymakers, from local communities to social movements. If the new scholar orients towards this idea of public knowledge or educational research as democratic participation then an orientation to Web 2.0 as a scholarly communication medium seems inevitable at this moment in time. As public

educational research stimulates debate in a variety of contexts, it has the potential to inspire and revitalize the discipline. Theory and research in representations 2.0 will give greater legitimacy, direction, and substance to public educational research. Finally, exposing the gaps between what is and what could be in teaching, learning and education could allow educational research to be more alive and engaging in public life.

The idea, then, is to shift conventional research out of a mainly small textual niche into the dynamic open participatory world moving and passing along (Jenkins et al. 2006). It could almost be conceptualized as research *en plein air* or “take-away” research moments in the manner of experimental music videos (for example, La blogotheque and Harvey’s Kitchen — see sidebar). These music video-blogs attempt to capture live moments of music-making as if the performance were immediate, unrehearsed and unedited in a kitchen or on the street corner. Representations 2.0 could similarly capture research from where it happens – the streets, the classrooms and students’ seats or points of view (Voithofer 2005; Goldman-Segall 1999). The trick is not to over-textualize or control the representation because the tools and medium are quite spontaneous and immediate.

Examples of Web 2.0

TED Talks

www.ted.com

On TED.com, talks and performances by scholars, authors, and VIPs are made open-access. More than 450 TED Talks are available and released under a Creative Commons license, so they can be freely shared and reposted. The designers of TED Talks refer to it as “a clearinghouse that offers free knowledge and inspiration from the world’s most inspired thinkers, and also a community of curious souls to engage with ideas and each other.”

At GoogleTalks (or @Google Talks or Talks@Google) is a series of ongoing presentations by invited speakers, sponsored by Google and given at various Google offices throughout the world. The series has feature categories such as Authors@Google, Candidates@Google, Women@Google, and Green@google. Guest speakers range from prestigious world leaders and ex-Presidents to little known poets and artists. As of February 2009, almost 2 years since its inception, there have been over 1,700 guest speakers and the talks are open-access to all.

MIT Technology Review (text-based articles, researcher blogs, videos)

<http://www.technologyreview.com/>

La Blogotheque

<http://www.blogotheque.net/-Concerts-a-empporter-?lang=en>

La Blogotheque’s take-away shows are music video podcasts. Every week, La Blogotheque films an artist or a band playing in the streets of Paris, a bar, a park, or even in an elevator. The designers of La Blogotheque state that they purposefully do not edit the videos to look flawless. Their goal is to keep the raw sound of the surroundings, to capture instants

(continued)

without preparation and to maximize spontaneity in the performance.

Harvey's Kitchen music videos on MonkeyWhale.com (user-generated programming on Blip.TV)

<http://monkeywhale.blip.tv/>

This videoblog of music videos are all filmed in Harvey Robinson's kitchen, the creator of the videos.

Fora.TV

<http://fora.tv/>

A website of information on noted speakers/authors including their CV/biographies, full video programs divided into chapters for easier navigation, highlights from each video program, transcripts of programs, free downloads, and related links.

Blip.TV

Blip.tv is a free hosting, distribution and advertising platform for creators of Web shows and other content. This site hosts video-bloggers, podcasts, and other original content, and allows users to cross-post or mash-up content.

Sudhir Venkatesh

<http://sudhirvenkatesh.org/>

An example of critical public sociology through online documentaries by Columbia University sociologist Sudhir Venkatesh, a researcher and writer on urban neighborhoods in the United States (New York, Chicago) and Paris, France. (Too see Sudhir Venkatesh on Fora.TV, check out

http://fora.tv/2008/01/24/Sudhir_Venkatesh_Gang_Leader_For_a_Day.)

Massachusetts Institute of Technology Open Course Ware

<http://ocw.mit.edu/OcwWeb/web/home/home/index.htm>

MIT OpenCourseWare (OCW) is a web-based publication of virtually all MIT course content. OCW is open and available to the world and is a permanent MIT activity. Free lecture notes, exams, and videos from MIT. No registration required.

Academic/Intellectual blogs

Freakonomics Blog (hosted by the New York Times website)

Steven Levitt (University of Chicago, Economics)

<http://freakonomics.blogs.nytimes.com/>

Terri Senft (University of East London, Media Studies)

<http://tsenft.livejournal.com/>

danah boyd (Fellow at Harvard's Berkman Center for Internet and Society)

<http://www.danah.org/>

William Merrin and David Gauntlett (Media Studies)

<http://twopointzeroforum.blogspot.com/>

In some cases, it could be argued that representations and Web 2.0 have the potential to replace an oft-perceived artifice of over-interpreted, over-mediated academic texts with a raw simplicity of performance, of *in-situ* life. Research in representations 2.0 does not attempt to over-produce or over-edit the research (there are many examples of academic blogs, including Freakonomics, Theresa Senft, and danah boyd's blogs – see sidebar). Indeed, if the visual-audio technologies are compelling enough, it is difficult to give these events too much textual interpretation beyond offering transcripts of the event for added layering (for example, see Fora.TV). The researcher can also become more accessible to

the public user-reader (for example, see Blip.TV). And researchers can make mistakes or stretch themselves to the limits of their knowing, and their actions and choices can be captured through 2.0 tools (see the site of Sudhir Venkatesh); doing so could be seen as one response to the call for researchers to share the fuller processes of research rather than the sanitized ones that often appear in the research literature (Clark et al. 2007; Russell 2003) or demonstrate the necessary act of “getting lost” in research (Lather 2008).

Institutional Tensions and Complexities of Research 2.0 for the New Scholar

In this section, I discuss how a narrow standardization or conventional limitation of research (and research tools) might not only restrict the imagination of possible representations and modes of communication/knowledge, but could also widen an artificial segregation and stratification between the university and the public. This could leave new researchers in a compromised and difficult position of academic identity construction: they are often already immersed in Web 2.0 tools but unsure of how to become certified researchers shaping educational realities and impacting public spaces of learning and teaching.

Although research 2.0 looks promising and a potentially good fit for new graduate research and applications, careful thinking about representations and the political implications are still needed in order to argue that this new genre of academic publication is acceptable and valuable to university and PhD accreditation (Federman 2007; Jaschik 2009). There will undoubtedly be misunderstandings and tensions as new researchers engage in these digital tools and representations and universities deliberate the legitimization of research 2.0.

The graduate researcher may have to face challenges in using representations 2.0, such as being forced into translation from an organic Web 2.0 media/environment into a text-based form. Even in text-based analog dissertations, graduate students are often required to “clean up” the voices of the participants in the interests of readability. The problem is that a dissertation that contains representations 2.0 cannot be easily translated into the conventional text-based, linear, static representations that supervisors, committee members or examiners can then recognize as doctoral research (see Barrett 2013).

Researchers using Web 2.0 will need to advocate for the quality and suitability of their digital research representations if facing rigid and/or skeptical institutional responses. In making their case, new researchers can rely upon the primary advantages of representations 2.0 which both immerse the reader-user into the research environment and stimulate dialogue between a larger public and research

in order to engage them in a co-construction of research meanings. Following Woo (2008), p. 324) adaptation and address of Agar's (2004) theory of constraints in representations, new scholars will probably need to argue some of the following academic considerations for representations 2.0:

1. The "dialogue" consideration. Can the representation 2.0 enable dialogue between the researcher, researchers, participants, and multiple publics concerned with the educational topic and inquiry?
2. The "scaling" consideration (Agar 2004, p. 23). Can the representation 2.0 allow for multiple publics to perceive broader or multiple issues within the participants' stories or accounts? And, within representations 2.0, can the individual reader pursue that knowledge they want or need next?
3. The "recognition" consideration. Can the representation 2.0 be realistic or multimodal enough (in terms of language, images, sounds, movements, locations, etc.) that audiences will recognize themselves in these events or moments of education?
4. The "appeal" consideration. Can the representation 2.0 be presented in a sufficiently non-intimidating, appealing, and accessible form that audiences can then be engaged with the narratives and issues raised through the representations?

When the new scholar can satisfy these four considerations as well as substantiate their own academic identity beyond vague feelings, they will have moved Web 2.0 research into representations 3.0. This process of validating representations 2.0 and making the academic moves explicit to a research community converts them into representations 3.0.

Future Scholarly Communication 2.0 and 3.0

In this chapter, I have offered an analysis of educational research and representations 1.0, 2.0 and 3.0, a description of the Web 2.0 changes that are forcing a reconsideration of conventional educational research and doctoral certification, an outline of what educational research 2.0 is, and a statement of the tasks facing universities and graduate accreditation in representations 3.0. I argue that Web 2.0 tools and representations permit researchers to engage a wider audience, an audience of the very people that educational research concerns or addresses, and open up opportunities to translate, transform and engage the public in dialogue about the themes and issues represented in educational research.

Many youth, university students and new scholars are already deeply engaged in digital media 2.0 but the institutional response of schools and universities has not kept pace. The question of the "fitness" (Agar 2004, p. 23) of representations 2.0 for doctoral research need to be inverted

to a question of how and why universities often remain slow to recognize the suitability and richness of representations 2.0 for today's educational audiences. New researchers need not simply fall back on the modes of representation 1.0 that are conventional or familiar to doctoral committees and PhD programs, especially if these conventional modes are acknowledged as not reaching the publics for whom the findings may be relevant and with whom the research could be extended, enlarged and enriched.

Working to make research travel outward into an enlarged public sphere such as the Internet has become plausible in a Web 2.0 era: greater connectivity in research and multimodality of digital representations can help diminish certain ethical risks and thin surface representation such as representing three-dimensional complex human situations as two-dimensional textual data and reducing complex lived situations to case studies. While Web 2.0 is ripe with possibility, academic researchers will need to learn how to co-author and interact with audiences in Web 2.0 or risk producing research with which few engage (Korteweg 2001).

Education researchers have much to share and to contribute to meaningful, equitable, and humane education, and I predict that in representations 3.0, scholarly communication and public participation about educational issues can become more successful. Knowledge translated into publicly engaging forms through immersive multimodal narratives and democratic participation is the goal of representations 3.0-knowledge for the public and with the public.

Note on Contributor

Lisa Korteweg is an Associate Professor at the Faculty of Education, Lakehead University in Thunder Bay, Ontario. Her research commitments include advocating for social justice in education and open knowledge exchange through digital means. Her work combines ethnographic methods with feminist and decolonizing critiques to examine how new digital media technologies shape our current debates about knowledge mobilization, scholarly communication, the public, and the pedagogic in education research. Current projects include digital representations in education research, teacher-researcher-community collaborations into decolonizing urban Aboriginal education, and reducing the cultural chasm between teachers and students in schools by raising teachers' understandings and engagements in a globally interconnected, multimodal digital world.

References

- Agar M (2004) We have met the other and we're all nonlinear: ethnography as a nonlinear dynamic system. *Complex* 10(2):16–24
- Allen M (2008) Web 2.0: an argument against convergence. *First Monday* 13(3). Retrieved 6 Mar 2009, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2139/1946>

- Ayers W (2006) Trudge toward freedom: educational research in the public interest. In: Ladson-Billings G, Tate WF (eds) *Education research in the public interest*. Teachers College Press, New York, pp 81–97
- Banchoff TF (1994) Interactive computer graphics, higher dimensional geometry and electronic publication: from flatland to hypertext. In: McMillan G, Norstedt M (eds) *New scholarship: new serials proceedings of the North American Serials Interest Group*, Inc. Haworth Press, Binghamton, pp 9–16
- Barone T (2006) Making educational history: qualitative inquiry, artistry, and the public interest. In: Ladson-Billings G, Tate WF (eds) *Education research in the public interest: the place for advocacy in the academy*. Teachers College Press, New York, pp 347–376
- Barrett MJ (2013) Responding to environmental crises through multimedia hypertextual research representation. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 569–574
- Boyd D (2008) Why youth (heart) social network sites: the role of networked publics in teenage social life. In: Buckingham D (ed) *Youth, identity, and digital media*. MIT Press, Cambridge, MA, pp 119–142
- Bruns A (2008) *Blogs, Wikipedia, second life and beyond: from production to produsage*. Peter Lang, New York
- Clark C, Brody M, Dillon J, Hart P, Heimlich J (2007) The messy process of research dilemmas, process, and critique. *Can J Environ Educ* 12:110–126
- Cormode G, Krishnamurthy B (2008) Key differences between Web 1.0 and Web 2.0. *First Monday* 13(6). Retrieved 26 June 2009, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2125/1972>
- Dede C (2008a) A seismic shift in epistemology. *EDUCAUSE review*. Retrieved 27 June 2009, from <http://net.educause.edu/ir/library/pdf/ERM0837.pdf>
- Dede C (2008b) Web 2.0: helping reinvent education. *THE J.* 2008. Retrieved 27 June 2009, from <http://thejournal.com/articles/2008/01/25/web-20-helping-reinvent-education.aspx>
- Dede C (2009) Technologies that facilitate generating knowledge and possibly wisdom. *Educ Res* 38(4):260–263
- Denzin NK, Lincoln YS (2005) *The SAGE handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks
- Federman M (2007) Plagiarism in a cut-and-paste, remix (or bricolage) culture. Retrieved 30 June 2009, from <http://whatisthemessage.blogspot.com/2007/09/talking-about-plagiarism-on-cbc-spark.html>
- Freire P (1970/2000) *Pedagogy of the oppressed*, 30th Anniversary edn. Continuum Books, New York
- Gitlin T (2002) *Media unlimited: how the torrent of images and sounds overwhelms our lives*. Henry Holt, New York
- Goldman-Segall R (1999) *Points of viewing children's thinking: a digital ethnographer's journey*. Lawrence Erlbaum, Mahwah
- Greenhow C, Robelia B, Hughes JE (2009) Web 2.0 and classroom research: what path should we take now? *Educ Res* 38(4):246–259
- Jaschik S (2009) Tenure in a digital era. *Inside Higher Education* (26 May). Retrieved 30 June 2009, from <http://www.insidehighered.com/news/2009/05/26/digital>
- Jenkins H, Clinton K, Purushotma R, Robinson AJ, Weigel M (2006) *Confronting the challenges of participatory culture: media education for the 21st century*. Building the field of digital media and learning. The John D. and Catherine T. MacArthur Foundation, Chicago. Retrieved 23 June 2009, from <http://www.newmedialiteracies.org/files/working/NMLWhitePaper.pdf>
- Korteweg L (2001) Inverted Hollywood: the pitch for e-knowledge meets pre-service teacher education. In: Barrell B (ed) *Technology, teaching, and learning: issues in the integration of technology*. Detselig Press, Calgary, pp 239–260
- Korteweg L (2007) Why environmental education should heed open-access technologies. *Can J Environ Educ* 12:175–182
- Ladow G (1997) *Hypertext 2.0*. Johns Hopkins University Press, Baltimore
- Lather P (2007) *Getting lost: feminist efforts toward a double(d) science*. SUNY Press, New York
- Lather P (2008) Keynote address: research as Praxis 2.0. *Provoking Research, proVoking Community (PRVC) conference*, University of Windsor, Windsor, 3–5 July
- Lenhart A, Madden M (2005) *Teen content creators and consumers*. Pew Internet and American Life Project, Washington, DC, 2 Nov. Available online at http://www.pewInternet.org/PPF/tr/166/report_display.asp
- Lenhart A, Madden M, Macgill AR, Smith A (2007) *Teens and social media*. Pew Charitable Trusts, Washington, DC
- Lenhart A, Arafeh S, Smith A, Macgill AR (2008) *Writing, technology, and teens*. Pew Charitable Trusts, Washington, DC. Retrieved 9 Dec 2008, from http://pewinternet.org/pdfs/PIP_Writing_Report_FINAL3.pdf
- Levi-Strauss C (1968) *The savage mind*. University of Chicago Press, Chicago
- Marcus GE, Fischer MJ (1999) *Anthropology as cultural critique*. University of Chicago Press, Chicago
- Miller JL (2000) What's left in the field . . . A curriculum memoir. *J Curric Stud* 32(2):253–266
- Murthy D (2008) Digital ethnography: an examination of the use of new technologies for social research. *Sociol* 42(5):837–855
- Neilsen M (2009) Is scientific publishing about to be disrupted? Retrieved 15 July 2009, from <http://michaelnielsen.org/blog/?p=629%3Cbr%20/%3E>
- O'Reilly T (2005) What is Web 2.0? Retrieved 10 Dec 2008, from <http://www.oreilly.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>
- Rosenau P (1992) *Post-modernism and the social sciences*. Princeton University Press, Princeton
- Russell CL (2003) Minding the gap between methodological desires and practices. In: Hodson D (ed) *OISE papers in STSE education*, vol 4. University of Toronto Press, Toronto, pp 485–504
- Said E (1994) *Representations of the intellectual*. Vintage Books, New York
- Schwandt T (2007) *The SAGE dictionary of qualitative inquiry*. Sage, London
- Senft T (2009) Questions on micro-celebrity. Retrieved 18 July 2009, from <http://tsenft.livejournal.com/>
- Shirky C (2002) *Weblogs and the mass amateurization of publishing*. Retrieved 30 June 2009, from http://shirky.com/writings/weblogs_publishing.html
- Shirky C (2008) *Here comes everybody: the power of organizing without organizations*. Penguin Press, New York
- Tapscott D (2009) *Growing up digital: how the net generation is changing your world*. McGraw-Hill, New York
- Thompson C (2007) The age of microcelebrity: why everyone's a little Brad Pitt. *Wired Magazine* 15(12). Retrieved 28 June 2009, from http://www.wired.com/techbiz/people/magazine/15-12/st_thompson
- Voithofer R (2005) Designing new media education research: the materiality of data, representation, and dissemination. *Educ Res* 34(9):3–14
- Wallace RC (2004) A framework for understanding teaching with the internet. *Am Educ Res J* 41:447–488
- Willinsky J (2002) Education and democracy: the missing link may be ours. *Harv Educ Rev* 72(3):367–392
- Willinsky J (2004) Scholarly associations and the economic viability of open access publishing. *J Digit Inf* 4(2):XX

-
- Willinsky J (2006) *The access principle: the case for open access to research and scholarship*. MIT Press, Cambridge, MA
- Willinsky J (2013) The new openness in educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 575–582
- Windschitl M (1998) The WWW and classroom research: what path should we take? *Educ Res* 27(1):28–33
- Woo Y (2008) Engaging new audiences: translating research into popular media. *Educ Res* 37(6):321–329

M.J. Barrett

Abstract

Through engaging in issues of research representation, this vignette takes up questions of what counts as knowledge in education research, and who gets to create and adjudicate it. The doctoral research study upon which the paper draws, uses the tools of Web 2.0 to both develop and support a representational response to human “autism” to the voices of the natural world. Poised at the cusp of what some call “the great turning”, the thesis and its dialogic methodology introduced starting tools to support those shifts in consciousness long recognized as critical for social, environmental, and economic sustainability.

Keywords

Knowledge • Research representation • Dialogic method • Decolonizing research • Hypertext

Introduction

Lisa Korteweg asks, “What forms of inquiry and representation might encourage researchers and the public to become more creative and collaborative problem solvers in Web 2.0?” (p. 569–560). This vignette takes up this question in the context of my doctoral research study (Barrett 2009) which used the tools of Web 2.0 to both develop and support a representational response to human “autism” to the voices of the natural world (Berry 1999). Poised at the cusp of what some call “the great turning” (Korten 2006; Macy 1998), the thesis and its dialogic methodology introduced starting tools to support those shifts in consciousness long recognized as critical for social, environmental, and economic sustainability. The need for these shifts is acknowledged by both scholars and practitioners in the environmental education field (e.g. Fien 1993; Sterling 2007), and was set amid increasingly blurred boundaries in qualitative research methodologies, insistence on epistemological and

ontological diversity in approaches to research (Guba and Lincoln 2005), as well as discontent with colonial assumptions and practices in research methods and methodology (e.g. Tuhiwai-Smith 1999). The study also took place at a time of unprecedented proliferation of electronic media, and actively explored ways in which these can be used to support diversity in research and its representation.

Entering Through Epistemology

In this emergent and frequently contested context, I arrived at the University of Regina to work on my doctoral studies with Dr. Paul Hart, one of the co-editors of this volume. Hart is known for his commitment to environmental education and the importance of attending to issues of legitimation, politics, and representation in research methodologies (e.g. Hart 2000; Hart 2013). Hart argues that questions of epistemology are central to making wise decisions about research methods, methodologies, and forms of representation; questions that were taken up in a very direct way by his previous doctoral student, Kathy Nolan (2013).

Just prior to my arrival, (Nolan 2001) had successfully defended a multi-layered work that challenged the

M.J. Barrett (✉)
College of Education, School of Environment and Sustainability,
University of Saskatchewan, Saskatoon, SK, Canada
e-mail: mj.barrett@usask.ca

hegemony of official everyday narratives of doctoral research at the University of Regina, as they related to “knowing and what counts as knowledge, and what it means to know (in) math and science” (p. i). Not only did her research bring forward key questions about knowledge, who gets to create it, and how it might be re-presented, the high interest in her work at Regina initiated many discussions about issues of representation in research more broadly and provided an important precedent for future graduate students. For Nolan, to complete her thesis required attending to epistemological and representational congruence, and to achieve this entailed the rewriting of beyond close to two thirds of the regulations defining dissertation formats as they were laid out by the Faculty of Graduate Studies and Research at the University of Regina.

I have to admit, however, that when I was first introduced to her work, I wasn't thinking about epistemology; I had only just learned how to pronounce the word. At that point I was more concerned about how I might create a dissertation with as much aesthetic appeal as Nolan's offered. Eventually, however, I realized I needed to make decisions about both methodology *and* representational form based on a match with my epistemological assumptions, research questions, and political leanings. These included a desire to create more spaces for the many voices of the more-than-human world (Abram 1996) to contribute to research (Russell 2005), and a desire to create a research text that was both academically rigorous and accessible, as well as of value to a wider public readership.

Theoretical Support

At the time of the submission of the dissertation, precedents for multimedia hypertextual dissertations had been established in other universities in Canada (most notably, the University of British Columbia and Ontario Institute for Studies in Education), and scholars such as Patti Lather (2001), Kathy Nolan (2005), Cynthia Dillard (2006), and those engaged in arts-based inquiry (e.g. Sinner et al. 2006) had provided strong arguments for a wider variety of forms of research representation. Some of the arguments put forward included the need to disrupt dominant paradigmatic assumptions about how knowledge gets produced and who gets to create that knowledge (Butler-Kisber 2002), as well as the importance of texts which support inclusion of multiple voices and represent research participants (whether human or more-than-human) in the most respectful ways possible (e.g. in environmental education research: Lotz-Sisitka and Burt 2002; and Russell 2005). Other useful arguments included the ethical imperative to provide publicly accessible texts (see Korteweg 2013; Willinsky 2013); the importance of speaking to a wide audience (e.g. Fine

et al. 2000); the acknowledgement of research as both product and process (Richardson and Pierre 2005); the significance of arts-based inquiry approaches in activist research (Finley 2005); and the blurring of boundaries between knowing, knowledge, and the research process itself (Barone and Eisner 1997). After discussing the form of my hypertext, my vignette highlights some of the processes my committee and I had to engage in order to enable this form of representation to become acceptable within this particular academic context.

Engaging the Form

Since form and text are inextricably linked to enable research both within and beyond conventional knowledge-making approaches, at this point in this piece, I utilize a structure that supports dialogic reading. In this instance, dialogic reading refers to the practice of deliberately engaging with an animate, more-than-human world in the process of meaning-making. In practical terms, this means that decisions about what to read, the order of reading (and whether you read the whole thing) can be made from beyond the limits of conventional ‘intellectual knowing’ and ‘in dialogue with’ an animate earth (see Harvey 2006a, b). This enactment is more difficult to accomplish within a linear essay form than on the associated hyperlinked website for the thesis (Barrett 2009). However, one can get a sense of the way in which a hypertext supports dialogic reading in the following section. To read dialogically, I suggest that you quickly, and without thinking or reading the text, randomly number some or all of the blocked-out sections below. Then go back and read the sections in that numbered order, rather than in the order in which they appear. If you do not put numbers on some of the passages, it could be that that particular passage will not be useful to you at this time.

The socially constructed human/nature **dualism** or **separation** of nature and culture is one of many “inherited dualisms that run deep in Western cultures” (Haraway 2004, p. 2; see also Abram 1996).

I speak of research and representation as a singular concept since how one can represent research determines, in part, how one can know, what one can know, and who can produce knowledge (Nolan 2001, 2005, 2007).

Theoretical development of the significance of hypertext (e.g. Morgan 2000; McKenzie and Timmerman 2007) highlights the importance of voice, power, methodology, method, multilinearity, and representation of complexity. And as McKenzie and Timmerman (2007) note, when using hypertext, analysis and

Perhaps the most significant arguments for this particular research and its representation are: (1) the desire for epistemological and ontological congruency, which supports knowledge-making processes that enable engagement with the energies of plants, animals, and other aspects of the more-than-human world,

(continued)

(continued)

writing are increasingly inseparable.

The multi-media hypertextual representation offers readers opportunities to attend to ontological and epistemological difference, in both experiential and explanatory forms.

Ultimately, when faced with the realization that a different kind of language is needed to research with and represent insights garnered through intimate interaction with the more-than-human world, I have turned to art, and eventually to hypertext, as a way of researching *through* rather than just *about* an animist ontology.

Support comes from texts like *The Authentic Dissertation* (Four Arrows 2008), current writing by animists (e.g. Harvey 2006a, b; Stuckey 2012), systems theorists (e.g. Laszlo 2008), arts-based researchers, Indigenous scholars (e.g. Cole 2002), and others advocating the importance of moving beyond dominant paradigms in research methodologies (e.g. Dillard 2006; Guba and Lincoln 2005).

and (2) the opportunity it provides to open up a shared ethical space (Ermine et al. 2004), in which Indigenous and non-Indigenous scholars and educators can talk with one another.

Precedents within arts-based inquiry bolstered my confidence in the possibility of the hypertextual form being supported by the Faculty of Graduate Studies and Research, University of Regina, as did ongoing discussions in research methodology more generally, and a general move towards electronic submission and storage of dissertations.

The form not only supports easier public access to research, but also provides openings to epistemological and ultimately, ontological, difference. In the instance of this particular research representation, the openings are to animism as a way of knowing.

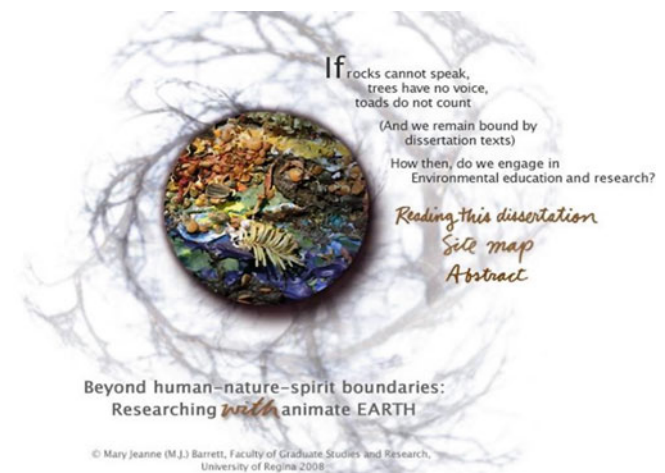
Until the privileged position of humans as the only subjects with consciousness, intentionality, and relational life is questioned, engaging in forms of research and representation from beyond the human intellect will be difficult to support.

This approach to a dialogic reading of a text may help disrupt normative assumptions about how knowledge gets created, and who creates knowledge. Indeed, in my study (Barrett 2009), I have explore how the non-linearity and ‘surfing’ commonly associated with engaging a hypertextual representation can enable a reader to (for moments at least) move beyond the ‘discursive rational mind’ (Bai 2009), de-center the normally privileged position of the human intellect within responses to academic writing, and even create multiple spaces for various members of an animate Earth to be co-participants in meaning-making processes. For readers interested in those aspects, please visit <http://www.porosity.ca>, while the following sections illustrate some of the key issues for consideration in producing a hypertextual document, thesis or dissertation with such ends-in-view.

Key Elements in the Process

Collaborations

I did not start the PhD with any background in hypertext technologies. Finding affordable technical help was an ongoing challenge, particularly since the project spanned several years, and the cost of hiring a professional in the field was, in most instances, prohibitive. The emergent nature of the project also made it difficult to “plan with the end in mind,” which is the normal advice offered to anyone developing a website. Partnering with two different graduate students as they were available (one from education, and another from computer science), and at key points in the process, hiring more expensive professional assistance, proved to be the most effective way to work through much of the design.



The dissertation home page shown above is an example of the kind of collaboration needed to complete this work. The art and text is the author’s; the conceptualization was a collaboration between the graphic designer and the author; the technical implementation was completed by the designer (Pitchgreen Communications) alone.

Collaborating with a landscape photographer and two composers¹ who generously offered their own creative work to support this project became some of the most important and joyous parts of the research and greatly enriched both the meaning-making process and the final product.

¹ I gratefully acknowledge the contributions of landscape photographer Cherie Westmoreland, and composers Carolyn McDade and David McIntyre for their creative contributions and permission to include their work in the dissertation.

Policy, Committee, and Politics

Critical to the successful completion of the dissertation was a strong committee which supported the move to hypertextual representation, and a supervisor who: (1) promoted the importance of connections between epistemology, ontology, and research representation; and, (2) understood the significance of engaging in research as an emergent process. This is not to say that the route was a smooth one. While committee members were generally in support of my use of hypertext as a form, none of us knew what that would eventually entail.

At the University of Regina, dissertations and Masters' theses using alternative text-based formats had previously been submitted (e.g. Nolan 2001), yet there was no uniform policy to address the issues raised by these works, nor an option for electronic forms of data representation and analysis. Up to this point, any deviation from the existing guidelines for theses and dissertations had been addressed on a case-by-case basis. After inspecting the practices of other universities, including University of British Columbia's *A/r/tography* program (see <http://m1.cust.educ.ubc.ca/Artography/>), it was decided that the best course of action was to put forward a motion to the Faculty of Graduate Studies to open up the format of dissertations for all students. A rationale was proposed, and an ad hoc committee of the Faculty of Graduate Studies and Research was struck to draft the final motion. This committee included representatives from education, engineering, arts, fine arts, science and First Nations University of Canada. The following motion eventually passed executive of Council, University of Regina, on April 22nd, 2009:

1. General Standards and Guidelines

The general standards associated with successful completion of Master's and Doctoral programs are outlined in FGSR [Faculty of Graduate Studies and Research] Calendar, at: http://www.uregina.ca/gradstudies/calendar/program_reqts.shtml

These standards also apply to non-text theses. In particular, non-text theses, like text-based theses, must demonstrate mastery of the subject matter, insight, critical analysis and synthesis. These aspects are addressed in text-based theses in the Literature Review/Introduction and Discussion sections. Non-text theses must have the content of these sections, but the formatting and presentation of these sections would not necessarily be the same as in text-based theses.

A major divergence between text- and non-text-based theses will lie in the nature of the data/results. These sections may in some instances comprise the bulk of the thesis (for example, audio/visual recordings of oral histories, novel computer programs, musical scores, and documentation of forms of artistic production and

performance). In many instances, text is not a feasible format for these sections and non-text approaches are much more appropriate for presentation of the research.

2. Description of Non-Text Formats within Proposals

In addition to existing procedures for these proposals, a description of the non-text thesis format must be formally approved by the student's supervisory committee and the department head or designate of the academic unit. A copy of the approved description will be forwarded to FGSR. The description of the non-text based format must be considered and submitted early in the program.

Requests for changes to the format must also be approved by the supervisory committee and department head or designate and forwarded to FGSR.

A copy of the description of the non-text format will accompany the thesis when it is sent to the external examiner prior to defense.

Final submitted materials will be consistent with the requirements of the U of R Library thesis repository capability.

(Source: <http://www.uregina.ca/presoff/council/executive/meetings/2009/AprilEC.pdf>)

Movement of the motion was slow, and although ultimately it progressed smoothly through the various committees with little controversy, the whole process (taking place over 9 months) was not free from tension. For instance, in early March, 2008, the initial response from the Faculty of Graduate Studies and Research was less than enthusiastic, and the options given at that time were: (1) the dissertation would be returned for revision if it did not meet existing formatting guidelines, or (2) if the committee could establish precedents for the form from other universities, then it could be considered. A follow-up exchange between myself and the Faculty of Graduate Studies and Research 7 months later repeated the first option: the dissertation must meet existing formatting standards or it would be returned.

Practical Words of Advice

Students and committee members supporting students in using Web 2.0 and beyond may wish to consider the following when deciding to engage with research representations employing hypertexts and multimedia:

1. If changes need to be made to university regulations, consider making a 'blanket change' rather than addressing issues on a case-by-case basis. There are enough precedents. Begin this process as early as possible.
2. The design process itself adds another layer of complexity to dissertation research and representation. Editing is a much more complicated process, given that some changes which appear simple may not be. This is both

time-consuming and potentially expensive. Specific requests for support to finance the hypertextual component can come from publishing preparation grants or other sources, but given that most technological support rates at this moment are in the range of CDN \$35–\$75/h, grant monies do not go very far. Universities may wish to establish a variety of other supports, including technological support centres where students can go to work on their designs outside the contexts of a particular class. At the time of completing this dissertation, this kind of support did not exist at University of Regina.

3. Acknowledge that partnerships are probably necessary for the completion of such a project. Be creative. For example, are there two graduate students (one with technical expertise, the other who is the primary author of the work) who could benefit from a creative partnership at different stages of the process? How might local artists be engaged in the process with benefit to both artist and researcher? Might they be co-researchers? Be creative not only about finding partnerships in the first place, but also about finding sources of funding to support artists' and/or web designers' contributions.
4. Recognize the significance of accessibility of research. Consider the kind of language necessary for the final document. How will you write to both academic and lay audiences, if that is an aim for using hypertext and multimedia?
5. Issues of technological change have yet to be thoroughly addressed by libraries. In addition to the CD version plus a copy of the title page, abstract, executive summary and reference list, a paper 'archival copy' of my entire dissertation will be stored in the University of Regina library, but necessarily is far from fully representative of the work.
6. Be prepared for some resistance, and do your homework well. But also know that precedents are established, and if a clear argument (whether based on epistemological congruence or accessibility of research) can be made for a hypertextual form, there should be no reason for it not to be considered acceptable research.

Summary

As Korteweg, Willinsky and Nolan note in this volume, representation of research is political, and provides opportunities to take up issues of what counts as knowledge, and who gets to create and adjudicate it. While the web provides particularly effective possibilities for communicating with a wide audience, it also assumes access to technologies and skill in using them. Its potential for engaging epistemological differences, and for researchers

to become more creative problem-solvers in the process of knowledge generation and dissemination is definitely encouraging, yet even in this context, one should not assume it is the best way to represent all research. While its power is significant, those considering web-based representations of research need to consider the potential match between epistemological assumptions, research questions, politics, and intended audiences for an inquiry.

Note on Contributor

M.J. Barrett is cross-appointed in the College of Education, and School of Environment and Sustainability, University of Saskatchewan, Canada. Her research interests include how educators find ways to engage with an animate earth, while her current work draws on qualitative methodologies and decolonizing research approaches to investigate ecological identity and experiential education, such as "Two Eyed Seeing" as a means to integrating diverse knowledges and ways of knowing, e.g. indigenous perspectives with those of Western science. She (sometimes reluctantly) engages electronic media in the service of these educational and research objectives.

References

- Abram D (1996) *The spell of the sensuous: perception and language in a more than human world*. Pantheon, New York
- Bai H (2009) *Re-animating the universe: environmental education and philosophical animism*. In: McKenzie M, Bai H, Hart P, Jickling B (eds) *Fields of green: restoring culture, environment, and education*. Hampton Press, Cresskill, pp 135–151
- Barone T, Eisner E (1997) *Arts-based educational research*. In: Jaeger RM (ed) *Complementary methods for research in education*, 2nd edn. AERA, Washington, DC, pp 73–99
- Barrett MJ (2009) *Beyond human-nature-spirit boundaries: researching with animate EARTH*. Unpublished doctoral dissertation, University of Regina, Regina. Available at www.porosity.ca
- Berry T (1999) *The great work: our way into the future*. Random House, Toronto
- Butler-Kisber L (2002) *Artful portrayals in qualitative inquiry: the road to found poetry and beyond*. *Alta J Educ Res* 48(3):229–239
- Cole P (2002) *Aboriginalizing methodology: considering the canoe*. *Qual Stud Educ* 15(4):447–459
- Dillard C (2006) *When the music changes, so should the dance: cultural and spiritual considerations in paradigm 'proliferation'*. *Int J Qual Stud Educ* 19(1):59–76
- Ermine W, Sinclair R, Jeffery B (2004) *The ethics of research involving indigenous peoples*. Indigenous Peoples' Health Research Centre, Saskatoon
- Fien J (1993) *Education for the environment: critical curriculum theorizing and environmental education*. Deakin University Press, Geelong
- Fine M, Weis L, Weseen S, Wong L (2000) *For whom? Qualitative research, representations, and social responsibilities*. In: Denzin N, Lincoln Y (eds) *Handbook of qualitative research*, 2nd edn. Sage, Thousand Oaks, pp 107–131

- Finley S (2005) Arts-based inquiry: performing revolutionary pedagogy. In: Denzin N, Lincoln Y (eds) *The sage handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 681–694
- Four Arrows, Aka Jacobs D (ed) (2008) *The authentic dissertation: alternative ways of knowing, research and representation*. Routledge, New York
- Guba E, Lincoln Y (2005) Paradigmatic controversies, contradictions, and emerging confluences. In: Denzin N, Lincoln Y (eds) *The sage handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 191–216
- Haraway D (2004) *The Haraway reader*. Routledge, London/New York
- Hart P (2000) Requisite variety: the problem with generic guidelines for diverse genres of qualitative inquiry. *Environ Educ Res* 6(1):37–46
- Hart P (2013) Destabilizing representation of research in education. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 479–488
- Harvey G (2006a) Animism: respecting the living world. Columbia University Press, New York
- Harvey G (2006b) Animals, animists, and academics. *Zygon* 41(1):9–20
- Korten D (2006) *The great turning: from empire to earth community*. Berrett-Koehler Publishers and Kumarian Press, San Francisco
- Korteweg L (2013) Representations 1.0, 2.0, 3.0. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 559–567
- Laszlo E (2008) Quantum shift in the global brain: how the new scientific reality can change us and our world. Inner Traditions, Rochester
- Lather P (2001) Postbook: working the ruins of feminist ethnography. *Signs: J Women Cult Soc* 27(1):199–227
- Lotz-Sisitka H, Burt J (2002) Being brave: writing environmental education research texts. *Can J Environ Educ* 7(1):132–151
- Macy J (1998) *Coming back to life: practices to reconnect our lives, our world*. New Society Publishers, Gabriola Island
- McKenzie M, Timmerman N (2007) Relationality in web-based hypermedia research: a working example in teacher education. In: Irwin R, Leggo C, Gouzouasis P (eds) *Being with A/r/tography*. Sense Publishers, Rotterdam, pp 125–140
- Faculty Council Agenda and Minutes (2009) University of Regina. Retrieved from the world wide web, 2 July 2009. <http://www.uregina.ca/presoff/council/executive/meetings/2009/AprilEC.pdf> and <http://www.uregina.ca/presoff/council/executive/meetings/2009/aprECMinutes.pdf>
- Morgan W (2000) Electronic tools for dismantling the master's house: poststructuralist feminist research and hypertext poetics. In: St. Pierre E, Pillow W (eds) *Working the ruins: feminist poststructural theory and method in education*. Routledge, New York, pp 130–149
- Nolan K (2001) *Shadowed by light, knowing by heart: preservice teachers' images of knowing (in) math and science*. Unpublished doctoral dissertation, University of Regina, Regina
- Nolan K (2005) Publish or cherish? Performing a dissertation in/ between research spaces. In: Barnett R (ed) *Reshaping universities: new relationships between research, scholarship and teaching*. McGraw-Hill/Open University Press, Maidenhead, pp 119–135
- Nolan K (2007) *How should I know? Preservice teachers' images of knowing (by heart) in mathematics and science*. Sense Publishers, Rotterdam
- Nolan K (2013) The heART of educational inquiry: deconstructing the boundaries between research, knowing and representation. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 517–531
- Richardson L, St. Pierre E (2005) Writing: a method of inquiry. In: Denzin N, Lincoln Y (eds) *The sage handbook of qualitative research*, 3rd edn. Sage, Thousand Oaks, pp 959–978
- Russell C (2005) “Whoever does not write is written”: the role of “nature” in post-post approaches to environmental education. *Environ Educ Res* 11(4):433–443
- Sinner A, Leggo C, Irwin R, Gouzouasis P, Grauer K (2006) Arts-based educational research dissertations: reviewing the practices of new scholars. *Can J Educ* 29(4):1223–1270
- Sterling S (2007) Riding the storm: towards a connective cultural consciousness. In: Wals A (ed) *Social learning towards a sustainable world*. Wageningen Academic Publishers, Wageningen, pp 63–82
- Stuckey P (2012) Being known by a birch tree: animist refigurings of Western epistemology. *J Stud Relig Nat Cult* 4(3):182–205
- Tuhiwai-Smith L (1999) *Decolonizing methodologies: research and indigenous peoples*. Zed Books, New York
- Willinsky J (2013) The new openness in educational research. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 575–582

John Willinsky

Abstract

This chapter explores notions of what it means to “represent” a work of research in the act of writing up a study informed by the pragmatic philosophies of Richard Rorty and John Dewey. The argument is framed within current concerns in the educational research community over ways of raising the scientific nature of scholarship in this field. The chapter then extends this discussion of representation by examining scholarly communication practices that can increase the openness of this work as a guiding principle in the advancement of science, discussing open access and open data strategies for enhancing both the impact and the public good quality of the work.

Keywords

Scholarly communication • Open access • Philosophy of science • John Dewey • Education research

Introduction

This companion to research in education turns to the theme of “representing educational research,” following sections on “conceptualizing”, “characterizing”, “contextualizing”, and “legitimizing” educational research. The act of representing research would seem to entail writing up the work, placing it within the context of research in the area, describing the design and methodological choices made, analyzing the findings and drawing conclusions on the results of the research. Representing the research would also seem to involve making the work public, perhaps by initially presenting it in a conference setting and then selecting a suitable publication vehicle for it, most likely a peer-reviewed journal. It might also involve, less commonly, submitting a summary of the research to a professional/trade magazine, or an op-ed piece for the newspapers or, in very recent times, a blog posting.

All of this representational work forms a significant aspect of doing research, one that is taking on a particular

importance as more people are asking about the contribution research makes to education and as evidence-based policy initiatives in education, such as the No Child Left Behind Act in the United States, identify research as a necessary basis for program support. Educational researchers would seem to face an increased responsibility for the reach and “impact” of their work. While traditionally scholars have tended to minimize such responsibilities — it is enough to publish and then perish — changes are afoot in scholarly publishing that enable researchers today to have their work reach out further, beyond the circle (and citations) of the researcher community. My aim is to ensure that readers of this chapter are in a better position to take advantage of these new developments as a means of increasing the impact and value of the work they do, not only for researchers worldwide, but for education professionals and interested members of the public.

Representing Research

The first thing to note is that there is more to making research public than is conveyed by the sense of *representing research* as an act of representation. It may even be

J. Willinsky (✉)
Graduate School of Education, Stanford University, Stanford, CA, USA
e-mail: john.willinsky@stanford.edu

somewhat misleading to think of the article as representing research. To set out to represent a given act of research suggests, after all, that what is involved is a decidedly two-step sequence. First, one plans and conducts the research and then one decides how best to represent the research, perhaps beginning with a conference presentation. Representation, in this sense, stands at a remove from the original act. A representative, to take another example, stands in for and acts on behalf of someone else, typically in a public way.

To suggest that researchers at some point in the research process decide it is time to represent the research also suggests how the actual research is thought to take place in a closed and private (anonymous) way. While educational research may rarely be a thing of secured-access laboratories, the educational researcher in the public school or in other educational settings, whether with video camera or a notebook and a pencil, can still be thought of as engaging in a private professional act within a public space. There are exceptions, of course, in which teachers and even students may take an active hand in the research process, but this forms its own subfield within educational research known as action research or participatory research (Elliott 1991). Otherwise, only when it comes to representing the research in published form is the work shared and typically in a limited way with a narrow audience of other researchers working in the same area. My intent is to convince researchers that this is not the only way to think of their work, given the emergence of a new openness in scholarly work afforded by the internet. This new openness is not well served, however, if the idea of “representing research” is taken to suggest a gap between the act of research and the subsequent manner of its representation.

In an effort to increase the public quality of research, I want to move beyond this representative approach. It tends to reinforce the idea that the real work of research takes place prior to the attempt to represent what took place and what it means. Thus I find the sense that one is now *writing up the research* something of a misnomer, as it suggests one is simply reporting on what happened. The act of writing is just as integral to the research as any other aspect, whether the design of the study, negotiating access to the school and assembling of the sample. This is to say, the act of writing turns all that took place into a coherent, comprehensible act of research. It is not simply a process of transcribing (or representing) what took place in the name of a research project. Rather, the writing does more than assemble, as it actively constructs an integral whole out of the series of steps undertaken in pursuit of a research question. More than that, the soundness and strength of the study’s claims and contribution – that is, what makes it a work of research – is realized only through others’ analysis and review of this writing. The significance of this writing begins with the research proposal, whether for a grant,

research ethics clearance and/or thesis. Here again, one may be tempted to say that the proposal represents what is going to happen and to a degree (often less than expected) it does this, but it just as surely formulates and works out what is the logic of inquiry that will qualify the proposed activities as *research*.

Let me consider the implications of this more-than-representation approach for a moment. It lends a different weight to how the research is written and how it is shared and made public. After all is said and done (recorded and transcribed, measured and scored), the research no more or less than the resulting article, chapter or book alone forms the research’s public record. It’s true that for every set of lines quoted from an interview in the published study, there lies a transcript, as well as the recording of the interview locked up in a filing cabinet or more likely today, stored away on a hard drive. Yet the act of selecting and citing lines from the complete transcript, framing them with commentary that highlights and interprets their meaning, necessarily shapes the meaning of those lines, turning them into part of a research study. This act of writing turns a limited number of the subject’s words from data into the evidence and warrants for a particular set of conclusions.

How many of us, on reading through a transcript of an interview that we have conducted, have noticed something of great significance to the study we are working on, even though those very words and sentences flew right by us in the course of conducting and recording the interview without attracting a second thought at the time. The sort of reflection that follows in citing the transcript for the study is what educational research is all about, you might say. In writing, one reflects on what people said and did in the course of the study. Yet there really is no study until the study is written, revised, shared with others, revised again and then made public. The study needs an author, not a representative; it needs an author and an audience to make it part of the world.

This is no less the case in educational research that entails working with large data sets. The summary tables of scores and measures that appears in the final paper, along with a careful interpretation of those numbers, stands as the study. What is going to be *reported* on in the study shapes the steps taken and calculations made. The very claims of the research as *knowledge* are found in this public aspect. The written artifact is what bears critical scrutiny, beginning with a peer review process that is intended to ensure that the published version can stand on its own, not just in representing what took place in the course of the study, but in fully making sense of the results and identifying their significance. This takes nothing from the quality and integrity of the other elements that go into the research. It is, rather, to bring the act of writing into alignment with these other elements as necessarily integral to giving the research its claims to making a contribution to what we know.

Reporting Research

Now it needs to be acknowledged and readers cautioned that the educational research community tends to treat the act of publication as a matter of *reporting* on research in just this representative sense. For example, in 2006 the AERA formed a “Task Force on Reporting of Research Methods in AERA Publications,” led by Pamela A. Moss. The task force published the *Standards for Reporting on Empirical Social Science Research in AERA Publications* (2006).¹ The AERA’s setting of publication standards comes at a time when concerns about the scientific quality of educational research has been much examined, most notably with the *Scientific Research in Education* report published by the National Academic Press (Shavelson and Towne 2002).² The hope is that by addressing such issues as the minority student gap in achievement, the impact and significance of educational research can be considerably enhanced, in relation to other research fields, as well as in terms of influencing educational policies and practices.

The AERA guidelines describe how “reports of empirical research should be *transparent*,” which is a way of vividly suggesting that the goal is to be able to look through the report to the research itself, with the research, in turn, holding up a window to the actual educational event in question (AERA 2006, p. 33, emphasis in original). In a similar vein, the guidelines speak of how the “reporting should make explicit the logic of inquiry and activities that led from the development of the initial interest, topic, problem, or research question; through the definition, collection, and analysis of data or empirical evidence; to the articulated outcomes of the study” (ibid.). What I am arguing is that this representational and reporting approach to research diverts attention from the degree to which the research is carefully crafted all along to form a public argument – from the choice of the research question to the method of analysis – intended to move minds and hearts.

As well, the transparency metaphor, along with injunction to make explicit “the articulated outcomes of the study,”

suggest that the outcomes were articulated prior to the writing that goes into creating a presentation or article. The so-called act of reporting is, in effect, a time of thoughtful creation, reflection and revision of research outcomes and the logic of inquiry and other aspects of the study (despite whatever initial and excited hunches emerged during the data gathering or preliminary analysis). Where the AERA’s guidelines state that “reporting should make clear how the study is a contribution to knowledge” (2006, p. 34), I feel compelled to point out that the study is not in the least a contribution to knowledge until the articulation of the research is completed, reviewed and made public. One implication of my somewhat perverse stance – that we need to acknowledge, rather than overlook, the degree to which research is constituted by the act of writing and publishing – is the attention it calls to how this work is made public. In addition to the current wave of concern over improving the scientific quality of educational research, there are new opportunities for increasing the public quality and impact of this work.

Performing Research

Before exploring these new opportunities for extending the public status of educational research, however, there is another aspect of this representation metaphor to consider when it comes to educational research and the larger knowledge questions raised about representation by pragmatist and postmodern philosophers. To suggest that the research paper or article *represents* some act of research is analogous to treating research as representing, in turn, some aspect of a reality that exists beyond these efforts at representing it.³ Current efforts to elevate the scientific quality of educational research tend toward representational (or correspondence) theories of knowledge. If only we improve the scientific quality of our research, the argument goes, we will increase the accuracy and reliability with which we are able to represent some aspect of reality. This seems like little more than common sense at one level. You measure a child’s “performance” on a test at two points, one before and one after they

¹ The AERA committee that prepared the standards statement consisted of Richard P. Duran, Margaret A. Eisenhart, Frederick D. Erickson, Carl A. Grant, Judith L. Green, Larry V. Hedges, Felice J. Levine (ex officio), Pamela A. Moss (Chair), James W. Pellegrino, and Barbara L. Schneider.

² *Scientific Research in Education* includes principles of “pose significant questions that can be investigated empirically” and “link research to relevant theory” and “use methods that permit direct investigations of the question” (Shavelson and Towne 2002, p. 3). My focus in this chapter, however, falls within the scope of the sixth scientific principle, namely “disclose research to encourage professional scrutiny and critique” (p. 5), which in the context of this report I have written about directly elsewhere (Willinsky 2006).

³ For example, as Shavelson and Towne explain in *Scientific Research in Education*, “these [mid-range physical and social science] theories are representations or abstractions of some aspect of reality that one can only approximate by such models” (2002, p. 60). Yet in this important research statement, there is at work both a representative or “spectator theory” of knowledge, as Dewey called it (1988, p. 19), and place reserved for a more socially constructed approach: “Indeed, science is not only an effort to produce representations (models) of real-world phenomena by going from nature to abstract signs. Embedded in their practice, scientists also engage in the development of objects (e.g., instruments or practices); thus, scientific knowledge is a by-product of both technological activities and analytical activities” (p. 57).

engage in a related educational program, and thereby establish the degree to which the child learned from that program. Yet at the same time, one can no longer simply abide by this logic of inquiry without acknowledging the formidable and persuasive questioning of it by post-modern philosophers, such as Richard Rorty.

Rorty has considerable trouble, we might say, with claims about the accuracy and fairness of a given representation (Coombs 1997). For him, such claims are clearly based on an assumption that we are somehow able to compare our best representation of the child's learning with the *actual reality* apart from those representations. It is a powerful point and it suggests that we are, at best, comparing representations of that learning. Some representations are still better than others, in terms of, for example, representing poorly designed tests or a confusion and confounding of factors that went into the child's score. But if there is only representation, then, the concept of representation – as a correspondence theory between research and reality – does not make a lot of epistemological sense. Rather, research is better treated as an argument, a justification for certain claims about education. The strength of that argument will very much depend on the rigorous application of research standards, which are themselves justifications that depend on the internal consistency, coherence and logic that defines the particular genre of research. This is not about making anything up any more than it is about the precise representation of a reality. Yet if that seems all too much like philosophers themselves operating at a distinct remove from reality, especially the reality of daily classroom life, we would do well to consider an early educational turn to this postmodern stance.

No less an educational figure than John Dewey took exception to the idea that to engage in research is to represent the reality of this or that phenomenon. Rorty draws on Dewey, as well as Wittgenstein and Heidegger, in explaining why it no longer makes sense to regard science as holding up a mirror to nature (Rorty 1979).⁴ The quality of a given study in education, for Dewey, is to be judged by how well the resulting ideas help achieve valued educational goals. In Dewey's "Quest for Certainty," a series of lectures given in 1929, he directs our attention to understanding and testing the implications of our ideas and practices: "The test of ideas, of thinking generally, is found in the consequences of the acts to which the ideas lead, that is in the new arrangements of things which are brought into existence" (1988, p. 109). Critically attending to what comes of the

research is all about "creating a world in which the springs of thinking will be clear and ever-flowing" (ibid.). The knowledge question for Dewey and other pragmatists, including postmodern ones like Rorty, is not about reducing distortion in the reflection or representation of the world, it is about moving the world. By the same token, research does much more than represent our knowledge of the world. Research is the force of knowledge on the world. Thus, for Dewey it very much matters that we put our ideas about the schools to the most rigorously designed tests and that we make those tests as publicly available as possible, as a way of working on education. Can we increase the degree to which research contributes to the social (and public) justifications and meanings that can be said to be improving schools?⁵

The focus of pragmatist philosophy on consequences bears an interesting parallel with the What Works Clearinghouse (WWC) run by the U.S. Federal Government's Institute of Education Sciences. The WWC, established in 2002, is indeed focused on the consequences of individual program interventions, and as such presents the equivalent of research report cards for beginning reading and school dropouts, among other topics. It ranks specific school programs in terms of scientifically valid evaluation studies results, which are used to determine whether a program as a whole has positive, negative or mixed effects in terms of its claims. The WWC provides detailed background reports on all of the programs with summaries of the evaluation studies. The WWC represents a substantial public increase in access to a narrow band of research, which is based almost entirely on the use of standardized test results achieved to compare and assess educational programs. It can be seen as both part of, and a limit on, Dewey's "springs of thinking." The limit comes from how the WWC imagines that "what works" (and thus what counts as education) is about the use of largely commercialized educational programs, which can be assessed through experimental and quasi-experimental methods. The WWC is part of the opening of the world that Dewey envisioned, as it makes systematic reviews of research on educational programs part of the public and democratic realm. Its particular representation of research, however, amounts to a narrowing and closing off of all that research has to offer on the full spectrum of children's and teachers' experiences.

⁴ Given Dewey's pragmatism, "the notion of 'accurate representation' is simply" as Rorty explains, "an automatic and empty compliment which we pay to those beliefs which are successful in helping us to do what we want to do" (1979, p. 10).

⁵ For Rorty, knowledge is concerned with "when we understand the social justification of belief, and thus have no need to view it as accuracy of representation" (1979, p. 170); instead, we need to place the emphasis on making our work speak to others, on having it contribute to "this project of finding new, better, more interesting, more fruitful ways of speaking" (p. 360). This sense of responsibility might otherwise be lost if the research (prior to the writing process) is treated as the important thing that needs to be represented.

The WWC does not let the public in on how, for example, the emphasis on programs that increase test scores in literacy and math – as dictated by the No Child Left Behind legislation – is leading to increased allotments of time both for these two areas and for test preparation (McMurrer 2007). What also goes missing in the WWC’s particular representation of research is how differences in achievement test scores need to be understood in light of additional research on such things as: (a) the limited efficacy of current large-scale testing programs as a basis for managing education systems (Linn 2000); (b) the effect of growing economic disparities among communities on the availability of educational resources, such as skilled teachers (Hammond 2007); and (c) the continuing historical struggle to understand and overcome racial, cultural and socio-economic disenfranchisement in education and other settings (Banks 1995).

This is not a matter of scientifically-based research versus otherwise-motivated inquiry. What in this case determines what research is heard and supported is not the accuracy of representation, the scientific precision of measurement, or the undistorted mirroring of a reality. The degree to which one body of studies form part of the powerful discourse around education, while other forms of research remain at a distinct remove from public and political deliberations on education — although they may lauded and cited among researchers (see, for example, Hammond 2007) — is to a certain degree out of the researchers’ hands. Yet the researchers’ decisions to test certain assumptions, to strengthen and extend the promise of certain claims, contribute to the justifications and deliberations that determine critical aspects of how education is managed and directed. Thus, the relevance of the question that this chapter raises: are there ways of making the work of the educational research community more readily available for circulation and use among those engaged in this education discourse and practice?

Accessing Research

A new opportunity for changing the public status of educational research has fallen into researchers hands and has done so with the very idea of representing research in the sense of choosing how to make it public. New developments promise to move educational research far more fully into the public sphere and yet there are no guarantees that any given study will receive a new level of notice. Although it is obviously too early to surmise the historic significance of this new openness I am perhaps too easily tempted to rank the current potential increase in access with such leaps forward over the last four centuries as the introduction of the printing press in the fifteen century, periodical literature in the seventeenth century, and the penny post and public libraries in the nineteenth century. Suffice it to say that I

believe researchers need to give serious consideration to the possibilities of new technologies, especially in light of the amount of educational research that we have to contribute to the public sphere.

At the close of 2007, Ulrich’s *Periodical Directory* listed 1,300 refereed journals in the area of education. The U.S. Education Resources Information Center (ERIC) indexes more than 600 education journals, based on its own, screened list of titles.⁶ In addition, there are the more than 6,000 doctoral dissertations in education produced annually in the United States alone. As things now stand, all of this work is reviewed and revised prior to being published or deposited in libraries (in the case of dissertations). As a first step in increasing availability on a global scale, the journals and dissertations have moved online.

Yet what remains critical to whether a given research study is fully part of this public arena is the basis on which the work can be accessed. That is, the vast majority of research studies in education are accessible only to members of a subscribing research library or by direct purchase of the article from the publisher. There may be, according to the Technorati online search engine, close to 600 blogs that identify themselves as dealing with educational research, yet the quality of those blogs is severely limited in my estimation by the inability of the bloggers to link back to the vast majority of the original research studies, if the bloggers themselves happen to have access. Fortunately, a small but growing number of journals now publish an online edition that is “open access,” which means that they make their contents freely available to readers everywhere. The Directory of Open Access Journals, operated by the University of Lund, lists 211 peer-reviewed journals in education that are open to the public and freely available.⁷

⁶The ISI Web of Science assesses the impact factor for only 127 journals in education, and the articles in the top-ranked *Journal of the Learning Sciences* are cited an average of three times within the course of a two-year period. The journal published by Taylor and Francis (having acquired it on acquiring the publisher Lawrence Erlbaum) costs libraries \$645 a year for four issues, or \$612 for online only, while individual subscriptions are \$64.00.

⁷While new open access journals in education continue to appear, some of the field’s venerable titles, having experimented with open access, are going the other way. The online edition of the American Educational Research Association’s *Educational Researcher*, for example, was free for a number of years, until in 2007 the AERA moved its journals to Sage Publishers, at which point, access to individual articles in the *Educational Researcher* could be purchased for \$25.00. *Teachers College Record*, one of the field’s oldest titles, was also one of the earliest to try a form of delayed open access, making articles freely available six months after publication, usually leading to a huge increase in readership at that point. It has since reduced the degree of open access to a sampling of older articles, although it has instituted a very reasonably priced point of access for those seeking to read more recent work.

Now it is fortunate that many publishers, including Sage, the publisher of this book, as well as all of AERA's journals, have policies that allow authors to archive their final, refereed copy of their journal article on their own website or in a library repository (12 months after its original publication, in the case of Sage) where the work can be found, for example, through Google and downloaded from the repository. Even for publishers that refuse to allow authors to post their work in this way – and they are in the minority – as well as with publishers that request a delay in open access, authors are still able to list their work in such a repository immediately on publication with a “request copy” link, emulating the old method by which interested readers would request authors to send off-prints to colleagues (Harnad 2006).

Suddenly, one might say, researchers have in their hands the ability to greatly increase the quality and quantity of information available that might inform educational questions and discussions. All that research can bring to the current state of understanding what the schools can do need not be left up to the What Works Clearinghouse or the brief abstracts carried in ERIC. Researchers can ensure that when people are looking for more information on an educational topic, they will be able to find original and complete studies from a variety of perspectives and vantage points – in terms of school districts and individual children – rather than the selective representation of that research as determined by one governing body. Certainly, were all of this research to be made available, readers will encounter contradictory and inconclusive findings, disagreements about validity, changing interpretations, but that in itself has great educational value about the nature of knowledge (in which the studies neither add up to a single finding nor do they simply cancel each other out). It would be clear, as well, that people still have to come together to make the difficult decisions rather than expecting them to be dictated by the research.

All that researchers need do, to effect this considerable increase in the degree to which research is represented in the public sphere and available to all interested parties, is to take greater responsibility for the public status of their own work. They need to look into archiving copies of their work (with no limit on how far back they are able to go into their earliest work). They need to work with the journals they *patronize* – truly, as they freely donate their work to these publications – to ensure that the journals possess as liberal an archiving policy as possible in enabling authors to post copies of their work online. They need to encourage the journals of their scholarly societies to consider the proven economic viability of increased access through a variety of models, from reduced costs through free publishing software to making journal content freely available after, say, 6 months (Willinsky 2006). They could lend their support, as well, by sending the occasional paper to those journals that have immediate open access policies for all of their content.

The new standard for making public what is in the public interest today, whether we are talking about governments, public institutions or corporations, is to make it freely available online. This surely seems an entirely reasonable standard for research that is publicly funded and produced under the auspices of an educational institution (whether publicly supported or private and tax-exempt). But there is also an element of researcher self-interest (and vanity, for some) in this as well: there is a growing body of evidence that authors who make their work freely available are read and cited more often as a result of the increased accessibility of their work (Hitchcock 2007).

As if asking researchers to make their work public in this way weren't enough, a further exciting aspect of this new openness involves research data and sources. As I have said, the published research work stands as the published record, with scholarly journals referred to many times as “keeping the minutes of science” (Veltrop 1995). Print journals tend to limit the space available for each article, and as a result the data on which the research is based and which represented a considerable investment for the researcher (and funder) was often kept from the public record. Researchers carefully lock away the data and eventually dispose of it after a certain period of time (if only on researcher's retirement). Certainly in terms of research ethics, the identity of the participants in a study needs to be protected but locking up the files is not the only way of preserving the anonymity of a research subject and then there may be source documents (e.g., policies, directives, lesson plans) and research instruments whose inclusion in the public record would only serve to improve the “minutes of science.” The ability for researchers and readers to consult the data, sources and instruments can serve to strengthen a study's claims and increase its contribution to other studies, through replication and re-analysis, as well as lead to better alignment of measures across related studies and a greater efficiency of data gathering and use.

While it has always been possible for researchers to write to other researchers requesting copies of their data, this new standard of public availability is one of the more scientifically promising developments in online publishing. At the same time, it needs to be recognized that this openness and sharing is part of a long-standing first principle of science and scholarship, which is now being taken to a new level, involving, for example, access for researchers around the world (David 2007). That is not to say that this spirit of greater openness is bound to run headlong into the competitive and possessive nature of today's academic research culture. But even here, new online research ventures such as the Dataverse Network, which is dedicated to facilitating the online storage of research data sets, make it possible for researchers to not only easily create a secure archive for data, but to index it, license it (protecting attribution) and enable others to access it as easily as the related research,

while gaining credit for sharing one's data and contributing to other's research by capturing how often it is cited and used (King 2007).

Conclusion

What it means, then, to make one's research public is changing conceptually as well as technologically. A researcher constructs and crafts a study out of many elements, not least of which is the process of turning a study into a published work that forms part of the public record of educational research. The emphasis I am placing on this particular phase in the research process is not, it should be noted, about reducing any of the scholarly concerns with creating a thorough account of what research is about and would address, in all of the methodological and technical concerns that this can entail. What researchers have trained long and hard to do is to contribute to scholarly discourse, as it bears, in our case, on educational questions. It is a specialized discourse, yet at such, it has something new and fresh to add to the public circulation of information and it is suddenly in a position, at this historic juncture, to increase the degree to which it is available, as scholarly work and not popular science, to democratic deliberations, as well as to professional decision-making among educators.

Will such exposure and use of research among a wider public change or alter it, will it open this work to misuse and misunderstanding, will it still leave most research un-read, will it attract seemingly undue attention to some research, will it result in researchers having to face new and more frequent questions about their work? Undoubtedly. But none of that strikes me, at least, as reason enough to ignore both the possibility and responsibility for making as much of this scholarly work as public as possible. Literacy in a democracy has this way of leading to unintended lessons and unexpected interests among new groups of readers. The working-classes in Great Britain responded keenly during the nineteenth century to the wealth of published work that was made available through lending libraries and cheap editions, reading well above what was assumed to be their literate station and doing so in unexpected ways (Rose 2001).

Something would seem terribly amiss, then, for educational researchers to be too busy researching education to notice that how their work remains unnecessarily isolated within its own little corner of the academy, effectively cut off from this newly revitalized public sphere by the toll-gate barriers of article or subscription costs (even when those costs support scholarly societies intended to represent their interests in the public sphere). As we hold to how much we care about the issues, the students and the teachers that we write about, it does not make a lot of sense to watch others

selectively cull aspects of this work and represent it as the whole of the relevant educational research that bears on the schools today. We need to look to the consequences of the knowledge that we seek to contribute to education, consequences that have a lot to do with the logic of inquiry and the scientific scrutiny that the study receives, but consequences bound also to be affected by the sheer availability of the study. And to substantially increase that availability, all that we need do is fall into the habit of archiving our published work, occasionally publishing in open access journals and seriously considering the value of sharing our data sets. There appears no easier, more immediate way, at this point, to improve the scholarly and public standing of the work that we do and in that sense, to better represent full potential value of educational research.

Note on Contributor

John Willinsky is Khosla Family Professor of Education at Stanford University, sometime Professor of Education at the University of British Columbia, and Director of the Public Knowledge Project. Much of his work, including his award-winning book, *The Access Principle: The Case for Open Access to Research and Scholarship* (MIT Press, 2006), as well as Public Knowledge Project's open source software for journals and conferences, is free to download through the project website, <http://pkp.sfu.ca>.

References

- American Educational Research Association (AERA) (2006) Standards for reporting on empirical social science research in AERA publications. *Educ Res* 35(6):33–40
- Banks J (1995) The historical reconstruction of knowledge: implications for transformative teaching. *Educ Res* 24(2):15–25
- Coombs JR (1997) Rorty, critical thought, and philosophy of education. *Philosophy of Education Society Yearbook*. http://www.ed.uiuc.edu/eps/PES-Yearbook/97_docs/coombs.html
- David PA (2007) The historical origins of "open science": an essay on patronage, reputation and common agency contracting in the scientific revolution. Working paper, Stanford University, Stanford
- Dewey J (1988) The quest for certainty. In: Boydston JA (ed) *The later works, 1925–1953*, vol 4. Southern Illinois University Press, Carbondale, p 1929
- Elliott J (1991) *Action research for educational change*. Open University Press, Philadelphia
- Hammond LD (2007) The flat earth and education: how America's commitment to equity will determine our future. *Educ Res* 36(6):318–334
- Harnad S (2006) Optimizing OA self-archiving mandates: what? where? when? why? how? *Open Access Archivangelism* (Blog). <http://openaccess.eprints.org/index.php?archives/136-Optimizing-OA-Self-Archiving-Mandates-What-Where-When-Why-How.html>. 27 Sept
- Hitchcock S (2007) The effect of open access and downloads ('hits') on citation impact: a bibliography of studies. *Open citation project*. <http://opcit.eprints.org/oacitation-biblio.html>

- King G (2007) An introduction to the Dataverse Network as an infrastructure for data sharing. *Socio Meth Res* 32(2):173–199
- Linn R (2000) Assessments and accountability. *Educ Res* 29(2):4–16
- McMurrer J (2007) Choices, changes and challenges: curriculum and instruction in the NCLB Era. Center on Education Policy, Washington, DC. <http://www.ecs.org/html/Document.asp?chouseid=7511>
- Rorty R (1979) *Philosophy and the mirror of nature*. Princeton University Press, Princeton
- Rose J (2001) *The intellectual life of the British working classes*. Yale University Press, New Haven
- Shavelson RJ, Towne L (eds) (2002) *Scientific research in education*. National Research Council, National Academy Press, Washington, DC
- Veltrop J (1995) Keeping the minutes of science. In: *Proceedings of Electronic Libraries and Visual Information Research (ELVIRA) conference*, Aslib, London, No. 2–14, May 1995
- Willinsky J (2006) *The access principle: the case for open access to research and scholarship*. MIT Press, Cambridge, MA

How Open Publishing Tools Are Changing Research Representation: An Account of Early Open Journal System Users

76

Mia Quint-Rapoport

Abstract

In this response to Willinsky's chapter on representing research, I describe a small sample of early users of the open source software system the Open Journal System (OJS) who deployed the system to publish digital open access academic journals. Based on the responses and experiences of these users, I argue that participation in the open access movement by using online publishing tools which enable a 'do-it-yourself' ethic, allows for the creation and dissemination of new knowledge, the use of new epistemologies and alternative methodologies. All of these new knowledge spaces that have been created via OJS users work to fill in the gaps in the pre-existing traditional academic knowledge network and connect the processes of research and representation.

Keywords

Open Journal System (OJS) • Open Access Movement • Open source software movement • Online publishing • Universities

In his chapter, Willinsky considers the act of representing research and asks that we move beyond the traditional model in which the research act is disconnected from the primary research scenario and "isolated within its own little corner of the academy" (p. 581) towards a situation where the process is continuous and connected via use of digital and networked technologies. As he argues, this connection can be achieved through participation in the open access project. Some scholars do not share Willinsky's optimism; they link open access to problematic historical discourses and are critical of the open access movement (Haider 2007), or are concerned about the persistence of pre-existing social hierarchies that can be reinforced online (Scholz 2006) such as the dominant presence of Western academic institutions and Western epistemologies. In support of Willinsky's argument, I describe a small sample of early online journal publishers who were using the Public Knowledge Project's open source

software system, *Open Journal System*, to publish peer-reviewed journals. Their work depicts the 'do-it-yourself' revolution of digital open access publishing that works to fill in the long existing gaps in research representation, as described by Willinsky, in the traditional academic knowledge network.

In 2007, I began a study within the context of universities increasingly inhabiting what I refer to as digital academic space. My research goal was to understand what universities were doing on the Internet beyond the common conversations about e-learning or improving efficiencies via enterprise resource systems. As a student located within the interdisciplinary field of higher education, I was influenced by work on "academic capitalism" (Slaughter and Rhoades 2004). I was particularly attracted to the idea that post-secondary and higher education institutions were operating in a "condition of publicity" as a result of new media and the Internet (McLennan et al. 2005), and that the openness afforded by online technologies could help nurture the "development role of the university" (Peters 2006, p. 132) and in turn help public universities to more fully realize their public potential.

M. Quint-Rapoport (✉)
Department of Theory and Policy Studies, Ontario Institute for Studies
in Education, University of Toronto, Toronto, ON, Canada
e-mail: mia.quint@utoronto.ca

I chose to study the Open Journal System (OJS) for the following reasons: first, I wanted to investigate an open source software system as I knew this software development process possessed interesting academic roots; many early open source software developers were graduate students located at prominent American universities such as MIT and UC Berkeley (DiBona et al. 2006). This would locate the study within an existing conversation about activism, power and resistance on the Internet as well as in the academy since open source software is often cited as an early Internet social movement (McCaughy and Ayers 2003). Second, I wanted to research how academics have been getting involved in producing what I have called digital academic space: the OJS fit well within this parameter because it grew out of Willinsky's research interests in literacy and technology, and as a way, to paraphrase Willinsky, to keep public universities public. The OJS served as an example of a software project that was developed in an academic setting and was used largely by academics for academic purposes. I wanted to understand more about *what* researchers, scholars, and professors were actually doing in digitally mediated environments, and *how* they were doing it, in terms of their skill sets and who they were working with as they used the software.

For my study, I interviewed all of the software developers, self-proclaimed "hackers" who were, at the time, working on developing and distributing the software (where distribution refers to teaching, training, and communicating with users about online publishing and use of the OJS). I also spoke with some OJS user-developers, information technology specialists who were involved in implementing the software for larger journal initiatives in their geographic region: two from South Africa and one from Latin-America where, as Edgar and Willinsky (2010) had found, there are relatively significant pockets of OJS use.

As with many open source software developers, the OJS developers and users, some of whom were journal publishers from within the field of education, displayed a strong commitment to both the development of the OJS software project, and to the larger ideals of "freedom" and "inclusion" on the web. The developers, for example, referred often to the open source software mantra that "information wants to be free" and saw their OJS work as contributing to the strengthening of this principle in academe. Not only was I interested in how their personal social commitments tied into their software development, and how their OJS work reflected their academic interests, but I was also interested in their knowledge of and perspectives about OJS users.

According to one developer who communicated regularly with OJS users to help them install the system, an OJS user could often be characterised as "a particularly driven or visionary researcher or academic who sees a gap in the literature that somebody needs to fill". Another developer

described OJS users as: "they are people who have a burning passion about their topic, and they want to share that [passion], and create a new way of developing knowledge". In these characterizations I see that these OJS embody some of Willinsky's ideas about research in that they clearly were seeing the importance of representation in their own research processes. One OJS developer, however, did express a degree of ambivalence about the impact of the software: "I'm not sure if promoting the goal of people that are trying to present their findings, is a good field that I can get wholeheartedly behind. I'm not sure how much good it does in terms of the bigger picture." This developer's concern for the "bigger picture" reflects the criticisms made by those who argue that open access to scholarly knowledge via the Internet is not a sufficient response to larger systemic and structural modes of exclusion (e.g. Haider 2007).

My research participants were what I now refer to as early users of OJS. These users, who were on the whole academics located at different universities throughout the world, created journals within the OJS prior to or during 2007, some using the first version of the software, and some using an early release of the second version. Ten of these early adopters were academics working within the field of education and the journals they created were among the first 1,200 housed in the system. A 2009 survey describing 998 OJS journals shows that 30 % came from the social sciences generally (Edgar and Willinsky 2010).

The majority of the journals associated with the users in my sample developed spontaneously since they evolved out of the research interests and desires of the users and were not managed in a centralized fashion. As the users reported, they began their journals in order to communicate their research interests to a broader audience and found no other existing vehicles by which to do this. Using OJS, and adopting a 'do-it-yourself' mentality, these researchers began to represent themselves and their fields of interest online thereby initiating their own inclusion into the existing knowledge network. On the whole, their journals were produced on a volunteer basis; only two of the journals received any type of start-up funding, while a few received some technical help from their academic IT group or library. All of the education journals were what Edgar and Willinsky (2010) in their survey refer to as "scholar-publisher" produced journals, that is, journals created and managed directly by the scholar(s).

One of the more interesting aspects of OJS users related to the type of knowledge that was represented in their journals. Since the online journals were for the most part open access, their content was in many cases oriented towards "multi", "inter", or "trans" disciplinary "global" audiences and new methodologies and epistemologies, and emphasized the connections between research and practice. These OJS users found that their open journals enabled more

“connection-making” amongst their readers, since the OJS helped “link the ideas of researchers worldwide”.

Many were weary of being prescriptive about who they believed would be interested in their journal; as one user reported, “we are finding a huge interest in the journal from areas (i.e. academic disciplines) that we hadn’t seen before.” Another user described how “working with our various journals and with the OJS folks has opened up a whole new community where new relationships and connections have developed and ideas have flourished.”

These OJS users believed that knowledge is iterative and never in a stage of being final because there is always someone else from a different place — be it a discipline or geographic location — to play the role of re-interpreter. Having a journal online and freely accessible, they argued, facilitated this facet of knowledge creation because researchers located in different circumstances could bring their own localized perspectives to journal content.

Fast forward to 2010, 3 years after I conducted my research, and we find that there are at least 5,000 OJS journals in existence with a fair proportion of them in education; publishing a journal online and offering open access has become much more attainable.

Note on Contributor

Mia Quint Rapoport graduated from the doctoral program in higher education in the department of Theory and Policy

Studies, Ontario Institute for Studies in Education, University of Toronto. Her research examines what universities are doing in digital academic space, and has involved theorizing the conditions, dynamics and effects of ‘digitally mediated open research projects’ using the Open Journal System (OJS) as her case study. Mia received her MA from New York University in Media Ecology.

References

- DiBona C, Stone M, Cooper D (2006) Open sources 2.0: the continuing evolution. O’Reilly, Beijing, Sebastopol
- Edgar BD, Willinsky J (2010) A survey of the scholarly journals using Open Journal Systems. *Scholarly Res Commun* 1(2):1–22
- Haider J (2007) Of the rich and the poor and other curious minds: on open access and “development”. *Aslib Proc* 59(4/5):446–461
- McCaughey M, Ayers M (eds) (2003) *Cyberactivism: online activism in theory and practice*. Routledge, New York
- McLennan G, Osborne T, Vaux J (2005) Universities in ‘the condition of publicity’: how LSE engages with the wider world. *Global Soc Educ* 3(3):241–260
- Peters MA (2006) Higher education, development and the learning economy. *Pol Futures Educ* 4(3):279–291
- Scholz T (2006) The participatory challenge *Collectivate.net*, from: <http://www.collectivate.net/the-participatory-challenge/>
- Slaughter S, Rhoades G (2004) *Academic capitalism and the new economy: markets, state and higher education*. Johns Hopkins University Press, Baltimore

Tirupalavanam G. Ganesh

Abstract

The notion of ‘enabling impact’ can extend John Willinsky’s call for educational researchers to assume greater responsibility for making their research public. It is indicative of a shift in the culture of research utilization from one dominated by the development of a cultural elite to genuine public access and democratization of research. The notion promotes meaningful uses of research in the larger educational community of researchers, policy makers, practitioners, and the public. It also highlights the ephemeral fate that much educational research may meet. Drawing on the work of Carol Weiss on knowledge creep I discuss how educational researchers working collaboratively in knowledge cultures with concerned institutions and individuals from a variety of professions can work to lessen such creep. Enabling impact does not simply come at the end of the research process; it has to start with the inception of the research idea. Making public educational research with careful attention to influencing impact assumes significance in the newly reconceptualized role for universities as knowledge enterprises embedded in knowledge cultures, both local and global.

Keywords

Enabling impact • Research use • Knowledge creep • Knowledge enterprise • Knowledge cultures

Introduction

In educational research we have to contend with what Harvard policy analyst, Carol Weiss (1980) terms ‘knowledge creep.’ Its imagery of different channels for the circulation and percolation of ideas and findings underlies how some educational research may often take a lengthy period (even as long as 20 years) before it challenges or changes our assumptions about the world and the questions we need to ask. The concept begs the question: do we determine the usefulness of a published research report in education based on its immediate value? Weiss (1997) has clearly established

that most educational research does not have a direct impact on either practice or policy. In a seminal article on what “using research” in the realm of public policy may entail, Weiss (1979) described the many meanings of research utilization. Perhaps, not surprisingly, in 2010, the complex challenges she described associated with various models¹ of research use still remain. They include: that politics influences the selective funding and use of research; problem complexity and scientific uncertainty prevent researchers from taking the kinds of firm positions that are both comprehensible and compelling to non-specialist decision makers and the public; scholarship can never be wholly objective or

T.G. Ganesh (✉)
School for Engineering of Matter, Transport and Energy, Arizona State University, Tempe, AZ, USA
e-mail: tganesh@asu.edu

¹See Weiss (1979) for a thorough description of seven different meanings associated with the idea of “research use”: knowledge-driven, problem-solving, interactive, political, tactical, enlightenment, and intellectual enterprise of society.

autonomous and, therefore, research findings are often viewed as one set of competing interests among many, not the “truths” academics often imagine them to be; research findings may be too slow in coming to influence critical issues about which immediate decisions are needed; and the communication of research findings is inadequate, frequently because it is designed not to influence decision making, but rather to weather all possible challenges from academic peers (Feser 2007, p. 1). Clearly, the actual impact of educational research is difficult to assess in the short term. But should we then abandon the goal of wide dissemination of our educational research and allow the process of knowledge creep to take its course?

In “The New Openness in Educational Research,” John Willinsky describes what I term an irresistible mandate to educational researchers to make public their research. Willinsky calls upon researchers to “take greater responsibility for the public status of their own work” (p. 580). He offers an eloquent case to not only make public one’s own peer-reviewed research reports via archival practices, but also make the research data and sources available for secondary analyses, thereby enhancing the potential value of the research. I agree. When research results are not accessible to users (whomever they may be: other educational researchers, policy makers, practitioners, or the general public), because of tollgate access restrictions, for example, the salience and timeliness of the research is under threat. Obviously the first order of business, then, is to prevent research from suffering an ephemeral fate.

It might also be argued that educational researchers need to provide a focus on the potential value of their research that strikes a balance between short- and long-term impact. The inherent value of research is its utility for users, to meet users’ needs and purposes, both in terms of specificity and fit. While specificity and fitness for purpose are integral to research study design and publication, concern for these elements does not end with the publication of the research report. Without doubt, educational researchers have a professional and personal stake in ensuring wide access to their research in the hopes that it will be useful not only to the academic community but also to other intended end-users. Willinsky has outlined what educational researchers can do to ensure open-access to their scholarly publications. Yet, I would extend Willinsky’s call for the educational researcher’s assumption of greater responsibility for the status of one’s own research using the notion of *enabling impact*.

Enabling impact is about ensuring the influence of one’s research in the larger education community. In a knowledge economy² where higher education institutions are engaged

in the knowledge enterprise and faculty research is expected to be socially embedded, use-inspired, and relevant locally and globally, the idea of enabling impact assumes immense significance for all areas of research, including education research. Michael Peters (2007) describes the idea of ‘knowledge cultures’ as essential for universities to redirect their energies towards “the democratic possibilities and impulses of the historic shift from cultural elite formation to genuine mass access and democratic participation” (p. 24). At Arizona State University,³ where I work, the university’s design aspirations have sought to exemplify the values of a knowledge culture; the university’s stated aims include to: (1) leverage our place, (2) transform society, (3) value entrepreneurship, (4) conduct use-inspired research, (5) enable student success, (6) fuse intellectual disciplines, (7) be socially embedded, and (8) engage globally. Furthermore, Arizona State University’s research support infrastructure is now termed “knowledge enterprise development.” The role of the educational researcher in such a knowledge enterprise is to not only conduct research but also influence the use of educational research — thereby ensuring that the private professional act of research has pertinent public value.

Idea to Impact: Impact as Integral to the Educational Research Process

One may be inclined to interpret Willinsky’s call for responsibility to make public one’s research as merely making possible archived open-access to research that results from a private-professional act in a public education space. While open-access is an indispensable element of impact (and in itself is hardly a trivial task), in educational research one still must contend with the classic challenge of translating educational research for practitioners and policy makers so it can be applied in real world settings (see also Robinson 2013). Seldom is a piece of educational research picked up and acted upon immediately in educational practice. An often-heard lament is that educational research functions at a variety of scales and levels that perpetuates a divide amongst research, policy, and practice. Researchers have described findings from studies where this perceived divide was bridged (Coburn and Stein 2010). Peters (2007) makes the case that knowledge production and dissemination necessitates the exchange of ideas, which are dependent upon specific cultural conditions. These conditions include shared trust, rights, and responsibilities among different

²Peters (2007, 2010) has written extensively about the knowledge economy and higher education.

³See <http://newamericanuniversity.asu.edu/> for descriptions of Arizona State University’s design aspirations. For example, the design aspiration “conduct use-inspired research” requires that the university’s research have *purpose and impact*.

knowledge partners, institutions, and strategies. His idea of knowledge cultures is vital to educational research that is impactful. There is no doubt that the educational research process needs high quality and active collaborative involvement on the part of multiple entities across the research, policy, and practitioner sectors (Bransford et al. 2000; Davies et al. 2000). This involvement of users and funders of research is essential to enhancing impact, as their involvement opens up avenues for ownership of research findings and thereby its use and applicability.

What would such involvement entail? Active engagement could include roles in identifying applicable research questions, utilizing knowledge of exigencies of practice, advising and facilitating access to research participants, interpreting findings, and elaborating implications of findings for policy or practice. The complete range of expertise needed to undertake research from its initial idea to impact is situated in multiple organizations and individuals who have different professions. If educational researchers are to fully realize Willinsky's call to action by assuming greater responsibility for the public impact of their research, then assessment of potential impact and a plan for facilitating that impact needs to be integral to the research process. Enabling impact doesn't simply come at the end of the research process; it has to start with the inception of the research idea. This has implications for how researchers (and targeted audiences for the research) are prepared. They need guidance and training in impact practices and need institutional support and management.

Along with providing barrier-free access to research publications, educational researchers would also need to pay close attention to the impact phase of the research process. This will invariably require interpretation of findings for impact-target audiences. Research findings often need to be distilled and disseminated. This implies multiple publication formats with the combined expertise of communications specialists, librarians, and researchers. Herein, dynamic dissemination would entail tailoring materials in electronic and print formats. Increasing the use of educational research will require advocates who can shape awareness of research findings. Expert and peer opinion leaders can offer analysis, descriptions and quotes that support research use via print, audio, and video with new media technologies to facilitate research use. All of this necessitates management of more knowledge that is connected with research and which is plainly beyond mere data management.

University as a Complex-Adaptable Knowledge Enterprise

Assuming that educational researchers have permission to archive their published peer-reviewed scholarly publications, current archival practices often require that educational researchers demonstrate some technical savvy. While

making the research available freely, via say the researcher's personal website, in the form of a 'personal archive' is an important first step; enabling impact requires knowledge management skills that are aided by technology, which in themselves, are contingent on ever-changing advances in technology. Researchers' concern for enabling the impact of their educational research does not typically manifest beyond peer-reviewed publication and conference presentations. Institutional support systems with communication specialists, technologists with knowledge to harness new technologies for effective communication, and collaborative librarians as knowledge management experts are needed to support the role of the university as a knowledge development enterprise.

Given this, many university libraries are going much further than their traditional collection management role to primarily assume the role of knowledge management. Archiving faculty research publications and other non-peer reviewed materials with attention to enabling impact is emerging as key to the university library's role in the larger organization, culture, and society in which it is embedded alongside its local and global audiences. The role of the university academic and research librarian is also evolving to include outreach, advocacy, and engagement (Welburn et al. 2010). While the use of new technologies such as mobile computing to provide user-centered services (Greene et al. 2010) is also changing the role of the librarian. Librarians, along with others such as technology and communication experts, in collaboration with educational researchers can affect research impact. Enabling impact would begin with facilitating wide accessibility of research and include other elements. These elements would comprise enhancing salience of the research via active dissemination, maintaining closer links among researchers and practitioners, and recruitment of peer and expert opinions.

Educational research has to be made relevant with an emphasis on the public's (especially the targeted audiences) *need to know* this knowledge rather than merely it being *nice to know* (Nutley et al. 2003). A need to cultivate awareness of the research and its implications implies that the knowledge of the research users' (e.g., practitioners, policy makers) exigencies will be very important. Clues to how to interpret research findings will have to start with an understanding of what will make sense to the persons who will make use of the research. This understanding should influence how we create research outcomes that are relevant and applicable.

Repeated communications to reinforce messages, with tailored communication strategies appropriate to the targeted audiences, and direct communication in multiple formats such as demonstrations, workshops, and other forms of professional development with the research users will have to be carefully planned and implemented. Furthermore, in educational research, there is a need to strengthen research

findings by demonstrating a preponderance of evidence from multiple sources and multiple researchers. This is where peers and experts as advocates who shape opinions, and librarians, can play significant roles in enhancing the impact of educational research.

A university's competitiveness on a national and international stage is dependent on its research prestige, capacity, and dissemination. Therefore, the knowledge enterprise as a complex adaptive system gains importance in the changing landscape of the role of educational researchers and their collaborators. The need to make educational research more public has always existed. Responsibility for this begins with educational researchers ensuring open-access to their work, but this responsibility extends past this initial act to include enabling impact.

It is clear that assessing the impact of educational research has to move ahead of routine citation statistics in academic journals. We need to deeply consider Willinsky's proposal for archival open-access publications along with the notion of influencing research use. We have to embrace the idea that we are functioning in multiple knowledge cultures, for the idea of knowledge production, dissemination, and use is dependent on multiple individuals and organizations. And educational researchers need to be rewarded for their activities related to enhancing the impact of their research. University academic leaders and tenure processes need to be enhanced to value the complex nature of impact-facilitation and impact-assessment of educational research.

Note on Contributor

Tirupalavanam G. Ganesh is Assistant Professor of Engineering Education at Arizona State University's Ira A. Fulton Schools of Engineering. He has bachelors and masters degrees in Computer Science and Engineering and a PhD in Curriculum and Instruction. His research interests include educational research methods, communication of research, and k-16+ engineering education. Ganesh's research is largely focused on studying k-12 curricula, and

teaching-learning processes in both the formal and informal settings. He is principal investigator of the National Science Foundation sponsored project (2007–2011) *Learning through Engineering Design and Practice* aimed at designing, implementing, and systematically studying the impact an informal middle-school engineering education program.

References

- Bransford JD, Brown AL, Cocking RR (2000) How people learn. National Academy Press, Washington
- Coburn CE, Stein MK (2010) Research and practice in education: building alliances, bridging the divide. Rowman & Littlefield, Lanham
- Davies HTO, Nutley SM, Smith PC (eds) (2000) What works? Evidence-based policy and practice in public services. The Policy Press, Bristol
- Feser E (2007) Linking research and rural development policy: an introduction to the special issue. Special issue on rural development policy. *J Reg Anal Pol* 37(1):1–3
- Greene C, Roser M, Ruane E (2010) The anywhere library: a primer for the mobile web. Association of College and Research Libraries, Chicago
- Nutley SM, Percy-Smith J, Solesbury W (2003) Models of research impact: a cross-sector review of literature and practice. Learning and Skills Research Centre, London
- Peters MA (2007) Higher education, globalisation and the knowledge economy: reclaiming the cultural mission. *Ubiquity* 8(18):1–27
- Peters MA (2010) Three forms of knowledge economy: learning, creativity, openness. *Brit J Educ Stud* 58(1):67–88
- Robinson VMJ (2013) Reducing the research-practice gap through problem-based methodology. In: Reid AD, Hart EP, Peters MA (eds) *A companion to research in education*. Springer, Dordrecht, pp 341–352
- Weiss CH (1979) The many meanings of research utilization. *Public Adm Rev* 39(5):426–431
- Weiss CH (1980) Knowledge creep and decision accretion. *Knowledge* 1(3):381–404
- Weiss CH (1997) *Evaluation: methods for studying programs and policies*, 2nd edn. Prentice Hall, Upper Saddle River
- Welburn WC, Welburn J, McNeil B (2010) Advocacy, outreach and the nation's academic libraries: a call for action. Association of College and Research Libraries, Chicago

Index

- A**
Aboriginal, 136, 245, 293–296, 372, 452, 556, 573
Aboriginal knowledge systems, 294, 295, 452
Accessing education research, 410, 460, 467, 571, 573
 Education Resources Information Center (ERIC), 197, 198, 579
 growing body, evidence, 580
 journals, xx, 32, 33, 132, 198, 203, 579–581, 583–585, 590
 online research ventures, 580–581
 public access methods, 579
Achievement, 6, 7, 37, 211, 243, 259, 298, 320, 344, 394,
 410–414, 418
 barometer/continuum, 202
 determination, meta-analyses, 205
 effect, homework, 200
 enhancement, 202
 schools, 200
 size, effects, 199, 201
 students, 197, 200
 teachers, 202
Action research, 33, 126, 127, 177–187, 194, 195, 301, 423, 457,
 461–465, 467, 468, 471, 473, 485, 490, 494, 576
 Aristotelian rhetorical technique, analogy, 194
 Aristotelian *phrónêsis*/neo-pragmatic postmodernism, 189
 critical theory, 189
 educational, 346
 intentions, 348
 interpretation, 195
 neo-pragmatist perspective, 190
 and organizational learning, 191
 techniques, 193
 transcripts and analyses, 350
Adorno, T., 84–88, 178
Agoraphobia, 7
Agreement in judgements, 54, 55, 58, 61–63, 65
Alexander, H., 4, 5, 8, 13–23, 27, 28, 65
Alexander, R., 319, 320, 327
Apple, M., 244, 263–265, 369, 491
Appraisal, 7, 47, 49, 61, 166, 349, 353, 355
Arendt, H., 99, 120, 184
Aristotle, 18, 57, 87, 126, 131, 178, 189, 191, 193, 194, 435,
 474, 544
 capabilities, 195
 deliberation, 194
 dialectics, 191
 ethics, theoretical activity, 191
 inseparability, local and culture-transcendent elements, 190
 phrónêsis, 57, 189, 190, 194, 394
 praxis, 180
Arts-based approaches to education research or inquiry,
 xxvii, 9, 301, 484, 485, 513, 516–530, 533–537,
 570, 571
- B**
Badiou, A., 182, 184, 448
Ball, S., 37, 215, 216, 274
Bauman, Z., 43, 44, 303, 376
BES. *See* Best evidence synthesis (BES)
Best evidence synthesis (BES), 202
 developments, 211
 evidence-based approach, 210
 iteration, 209, 210
 objectives, 209
 teacher and leader inquiry and knowledge building cycle, 211, 212
Beyond reasonable doubt (BRD), 55, 62, 63, 166, 205, 392
Bhaskar, R., 48, 379
Biesta, G., 52, 53, 87, 117, 141, 203, 216, 391–399, 402–404
Bologna process, 289
Bourdieu, P., 15, 49, 94, 131, 220, 306, 324, 369, 409–411, 453
BRD. *See* Beyond reasonable doubt (BRD)
Bridges, D., 6, 7, 31–39, 41–44, 47, 49, 326, 434, 471–474
Buber, M., 20, 23
Bureaucracy, 239, 271, 297, 460, 466, 473
 function, policy making, 289
 structures, national, 290
Butler, J., 177, 185, 186, 216, 301, 302, 304–306, 308, 311,
 313, 418, 444
- C**
Capitalism, 36, 48, 183, 218, 221, 240, 251, 268, 270, 274, 290,
 291, 294, 325, 583
Care for the self
 ethical-existential attitude, 99
 experimental research, 98
 “hard core”, 99
 “incompetent” and “disabled”, 99
 Laboratory for Education and Society, 98
 self-discipline, 97
 workshop, 98
Caricature, 123–128, 159
Carr, D., 87, 130, 141, 394, 434
Carr, W., 87, 126, 130, 177–186, 189, 193, 346, 365, 367, 461, 462
Causal claims, 9, 13, 14, 17, 18, 21–23, 28, 52, 68, 70, 74, 75, 78,
 105, 107–109, 113, 134, 136, 152, 163–171, 173–174, 205,
 281, 304, 355, 366, 381, 392, 443, 509
 cooperation, competition, 170–171
 epistemic status, 165
 formation, 167
 and funding strategies, 169–170
 gold standard, determination, 164–165, 381
 LOPC, 167
 ontogeny, 165
 QXTs, 168–169

- Causal claims (*cont.*)
 RCTs (*see* Randomized controlled trials (RCTs))
 and research design, 164–165, 355, 393, 446
 scientific, legal and practical certainty, 166, 394, 402
 scientific standards, validity, 164, 430, 491, 503, 509
 theory-driven causation, 168, 439
- Cavell, S., 53–55, 58, 59, 62, 63
- Character of education research, 6, 129
 action research, 126
 against caricature, 125
 and conceptualisation, 127
 and contextualisation, 128
 generalizability, 126
 institutionalised and de-institutionalised forms, 128
 interaction and refraction, 124
 lifelong learning and post-compulsory education, 126–127
 and “quality criteria”, 127
 random-controlled trials and quasi-experimental designs, 126
 scientific educational research, 125–126
 teaching, 124
 traditions, creation, 124
- Clandinin, J., 13, 519, 521, 541, 543, 550
- Clinical education, 421, 424
- Collaborative education research, 59, 209, 211, 350
- Colonialism, 182, 245, 464
 definition, 293
 ontology, 294
- Communities, 6, 9, 35, 36, 47, 49, 54, 56, 110, 111, 124, 126, 133, 134, 210, 211, 304, 306, 308, 315, 323, 324, 327, 359, 367, 371, 372, 411, 431, 435, 436, 458, 560, 563
 epistemic, 7
 intellectual, 33
 youth (*see* Youth)
- Comparative education, 245, 333–338. *See also* International and comparative education culture, 325–327
 methodological approaches in research, 327–330
- Compelling cases, 244, 359–360, 466, 564
- Competencies, 11, 55, 112, 278, 464, 515
 measurements, advanced, 156
 talk, 157
- Constructivist, 14, 33, 49, 54, 62, 224, 302, 305, 323–325, 365, 368, 369, 372, 526
 approach, academic research, 520
 learning environment, 526
 research and learning, 519–520
- Context, 79, 112, 202, 239–246, 281, 285, 308, 325, 326
 Anglophone, 182
 context-transcendence, 184–186
 educational action research, 179
 pragmatist influence, 178
 specific and transcending, 177
- Contextualism, 189
 discourse, 240
 “European age”, 239
 European humanist legacy, 239–240
 ‘new historicism’, 240
 Nietzschean-inspired genealogical, 240–241
 ‘objective history’, 240
 and philosophy of context, 241–242
 poststructuralist (Foucault) and postcolonial, 240
 situated and subjugated knowledges, 242–245
- Contradictions and personal struggles in education research, 75, 315, 316
- Contradictory spaces, 295
- CPE. *See* Cultural Political Economy (CPE)
- CPE/E. *See* Cultural Political Economy of Education (CPE/E)
- Creativity, 37, 99, 108, 239, 244, 245, 281–287, 289–291, 293–299, 560
 agencies, 299–300
 capitalism, 290
 class, 286, 299
 colonialism (*see* Colonialism)
 contemporary policy, 239, 244, 289
 cultural capacity, 114, 298, 299
 description, 297
 destruction, 298–299
 discourse, 244, 245, 299
 and education, 271, 298
 Foucault and Enlightenment, 298
 globalisation, 283–284
 governmentality, 282–283, 297
 industries, 297–298
 knowledge workers, 108, 298, 299
 learning, 290
 marketisation, 291
 ontology, 286
 pedagogues, 291
 popular and academic literature, 282
 public policy and media debates, 281
 proliferation, discourses, 289
 and research, 99
 tensions, 295–296
 and uniformity, 290
 (un)ethical policy, 285–286
- Crisis of representation, 480, 482, 483, 486, 563
- Criteria, research 11, 48–49, 127, 185, 285–286, 359, 368, 408, 425–427, 429–431, 433–440
 evaluation, 376
 judging, research quality, 382
 methodical, 380
 noncontingent, 383
 plausibility and credibility, 383
 positivist/scientific, empirical inquiry, 382
 quality, educational research (*see* Quality criteria)
 testing hypotheses and theories, 377
- Criterion judgements, 11
 agreement, 427
 application, 425
 assessment processes, 427
 description, 425
 evidence (*see* Evidence in judgement)
 external, 430–431
 internal, 425–426
 knowledge, 427
 parasitic, 429–430
 piece of work, 427
 quality of piece, 426
 requirements, 426–427
 values, 427
- Criticality, 11, 88, 181, 182, 184, 185, 248, 250, 254, 259–261
 critical scholars of education, 260
 orientation, social phenomena, 259
 pragmatic approach, race, 261
- Critical race theory (CRT), 263, 316, 494
 and CTR, 248–249
 development, criticality, 259
 education, 248
 foundations, Leonardo’s critical reflections, 264
 race-centered argument, 260
- Critical realism, 27, 28, 370

- Critical education research
 ethos, 223
 framework, 247
 study, 521
 traditions, 501
- Critical social theory, 16, 249
- Critical theory, 17, 444, 445, 501
 action research, 189
 characterisation, 191
 neo-pragmatism, 190
- Critical Theory of Race (CTR), 248–249
- Critique, 7, 37–38, 77, 108, 124, 127, 235, 240, 245, 295, 321, 366, 371, 458
 cherished ideals, modernity, 179
 cognitivist and deontological grounds, 178
 educational values, 177
 identification, limit-attitude shifts, 235
 ideology, 184, 185
 immanent, 181
 philosophical underpinnings, action research, 179
 postmodernism, 185–186
 practice of philosophy, 235
 therapeutic, 181
 transcendent, 183, 184
- CRT. *See* Critical race theory (CRT)
- CTR. *See* Critical Theory of Race (CTR)
- Cultural capacity, 218, 219, 274, 283, 298, 299
- Cultural Political Economy (CPE), 267, 268, 277
- Cultural Political Economy of Education (CPE/E), 269, 274–275
 “knowledge economy” and “network society”, 268
 social contract, 268
 strategic relational approach, 268
 translation projects, 275
- Culture, 7, 15, 63, 126, 224, 325–330, 365
 conceptualization
 genealogy, 320–322
 national culture, modern societies, National culture
 creativity, 298, 299
 description, 319
 educational research, 320
 international and comparative, 320
- Curriculum, 16, 33, 34, 41, 97, 109, 113, 173, 260, 289, 321, 335, 367, 402, 460, 494, 503–510, 533, 534
 alternative academic curriculum, 97, 99
 art of curriculum thinking, 16, 402–404, 423, 541
- D**
- Davies, B., 215, 369–371, 392, 443–454
- Decolonizing education research, 565, 573
- Democracy, 53, 81, 186, 223, 323, 366, 391–399, 415, 491, 493, 501, 581
 definition, 218, 263, 327
 theories, 183, 185, 249, 264, 415, 483, 493
- Democratic educational evaluation, 33, 263, 404, 457, 462, 483
- Denzin, N., 368, 370, 409, 519, 541, 563
- Derrida, J., 34, 58, 62, 64, 87, 119, 185, 323, 419, 445, 448, 509
- Designing education research, 8, 127
 complexities, 68
 description, 67
 educational reform, 68–69
 empirical educational research, 67–68
 induction and prediction, 68
 interpretive stance, 74–75
 language, 69
 quantitative and qualitative educational research, 69–72
- RCT, 68
 study of education, 75–76
 WWC, 68
- Destabilizing representation, education research
 accuracy and fairness, 486
 activities and experiences, 481
 educational inquiry, 481
 educational research, 483
 frustration, 479
 interpretative research, 487
 narrative identity, 484
 ‘numerical summaries’, 483
 onto-epistemic proposition, 482
 ‘post-informed’, 486–487
 post modern orientations, 482
 qualitative researchers, 481
 reflexivity, 482
 social science research, 480
 socio-political justice, 483
- Deweyan pragmatism, 126, 142, 178, 396
- Dewey, J., 18–20, 22, 29, 78, 99, 131, 137, 394–396, 402–404, 439, 460, 474, 491, 577, 578
- Dialogic method, 34, 569
- Dialogue, 8, 57, 64, 184, 372, 552
 definition, 191
 and judgement formation
 cultural pre-understanding, 21
 ethical traditions, 22
 experience, 21
 interconnected levels, 20
 moments, 20
 norm-governed and norm-generating, 21
- Digital research
 and publication, 561
 quality and suitability, 564
- Disability studies in education, 57, 216, 417–419
- Disciplinary, 34–35, 101–105, 272, 277, 298, 584
 debates, education, 117
 reconfiguration, education, 118
- Disciplinary interconnections, 109, 268, 335–336
- Disciplines, 7, 101–104, 109, 114, 124, 157, 220, 273, 433, 457, 461, 462, 465, 563
 Bain on educational research, 31–32
 claims, 35
 criteria, judging theories, 48–49
 development of classroom action research, 33
 different forms of representation of research, 33
 discourse, 37, 42
 educational enquiry, 32, 41
 emergence of curriculum, 33
 epistemology and academic disciplines, 47–48
 ‘evidence based’ educational policy, 38
 expansion, repertoire of research methodologies, 33
 foundation disciplines, 33
 historical or comparative approach, 32
 history of pedagogy, 32
 Hunt, 36
 interdisciplinary domains, 41
 knowledge and understanding, 37
 to post-disciplinarity, 34–35
 post-empiricist account of knowledge, 49–50
 power-knowledge structures and systems, 38, 42
 relationally-focused framework, 6
 research methods and methodologies, 33
 rules, 36, 44
 social and epistemological practices, ‘academic tribes’, 38

- Disciplines (*cont.*)
 student and educators' experience, 38
 syntactical structures, 42
 theoretical and interpretative frameworks, 34
 vitality, educational inquiry, 6
- Discourse, 33, 37, 57, 119, 125, 129, 131, 180, 183, 216, 219, 221, 268–269, 281, 282, 290, 293, 322, 323, 364–365, 369, 436, 444
 craft and art, 545
 and discursive structures, 545
 idea of knowledge, 270
 knowledge economy, 269
 lifelong learning, 273
 and practices, 268, 359
 research, 539
 rhetoric of storytelling, 541
- Distance, 11, 57, 105, 108, 125, 181, 186, 220, 272, 274, 291, 440, 549, 561
- Diversity, 301, 412, 461
 acknowledgement, intellectual resources, 36
 awareness, 368
 culture and ecological, 371
 disciplined forms of enquiry, 38
 dominant discursive formations, 286
 epistemological, 364, 366, 367
 learner, 114
 methodological approaches, 133
 ontological, 569
- “Dual epistemology revisited”, 323
 cultural meaning, 20
 personal knowledge, 20
 reductionism, 19
 “Two Dogmas of Empiricism”, 19
 weak empiricism, 19
- Dunamis, 194, 195
- E**
- Echo stories, 555–556
- Education, 4, 7, 9, 51, 54, 59, 80–81, 125, 134, 156, 177, 209–212, 215, 219–221, 233, 274, 285, 289, 297–300, 320, 325–330, 391–399, 460
 analysing, 108
 applying, 108–109
 conceptualising, 108
 critical postmodern skepticism, 119
 and disciplinarity, 102, 117
 empirical approaches, evaluation, 118
 experience, 107
 humanistic/natural scientific, 118
 interdisciplinarity
 enlightenment, 103
 intellectual and practical work, 102
 learning, 102
 sociology and anthropology, 102
 knowledge, 106–107, 267, 269
 learning, 109–110
 metadisciplinarity, 103–104
 “metadiscipline”, 119
 “natality”, 120
 natural sciences, 118
 nature and status, 101
 neo-liberal political theory, 270
 OECD, 269–270
 pedagogy, 110–113
 re-thinking, 117
 science, 104–105
 scientific knowledge, 118
 type, epistemological synthesis, 119
- Educational action research, 6, 126, 127, 194, 346
 Anglophone context, 182
 colonialism, 182
 context-transcendence, 184
 emancipation and context-transcendence, tensions, 177
 empirical challenge, 179
 and ideal, critical social science, 178–179
 Kantian proclamation, philosophy, 182
 neo-pragmatist objections, Habermas inspired action research, 180–182
 postmodernism, 184–186
 practical discourse, 183
 theoretical challenge, 179
 values, 183
- Educational practice, 52, 53, 180, 273, 346, 438, 457, 460
 description, 392
 functions, 397
 professional judgment and practical epistemology, 394
- Educational psychology
 cognitive developmental psychologies, 218–219
 correction, individualist bias, 216
 Foucauldian approach, 137
 impact, individualism, 218
 importance, society, 217
 liberal individualism, 218
 normalisation and surveillance, 217
- Educational research, 13–39, 47–59, 61–65, 79, 80, 141–143, 155–162, 177, 209–212, 215–225, 229–231, 233–235, 239–246, 286, 363–373, 408, 433–440, 457–468, 561–563
 accessing research, 579–581
 ad hoc hypotheses, 147
 analogy, gestalt switches, 149
 as “a way of life”, 10–12
 “bottom-up and top-down” strategies, 152
 causation, 136
 center of continuum and NRC report, 132–134
 confirmation and scientific method, 149–150
 criterial judgements (*see* Criterial judgements)
 description, 61, 301–302, 575
 empirical inquiry, 146
 gold replacement, platinum standard, 137–138
 “good evidence”, 138
 homology, 392
 human involvement, truth, 61–64
 “left” pole of continuum, 131–132
 “logic of inquiry”, 137
 “methodolatry”, 4, 8, 125, 139
 natural philosophy, 145–146
 nature of “scientific rigor”, 131
 New Babel, 129–130
 Newtonian mechanics (NM), 147
 objective, enterprise, 151
 objectivity, 142
 paradigms
 dialogue and judgement formation, 20–22
 dual-epistemology revisited, 19–20
 knowledge concepts, 14–16
 “methodology wars”, 14
 methodology wars and research paradigms, 17–19
 pro-positivism, 14
 study of education, 16–17
 transcendental pragmatism, 22–23
 performing research, 577–579

- “physics envy”, 130–131
- Popper’s philosophy of science, 146
- precession, mercury perihelion, 147
- and problems, PBM, 353
- qualitative vs. quantitative approaches, 152
- quality and impact, 392
- quality criteria (*see* Quality criteria)
- quantitative and qualitative methods, 141–142
- rational model of decision making, 135
- reporting research, 577
- representing research, 576
- and research as education
 - enlightenment, 89–90
 - spirituality, 87
- RFT, 136
- right-hand “pole” and “gold standard”, science, 134–135
- rigorous/believable/reliable scholarship, 135
- scientific method, 147
- scientific theories, 143, 151
- sense impressions, 148
- Stevinus’s thought experiment, 148
- systems, natural science, 153
- transformation, 391–392
- Education Resources Information Center (ERIC), 197, 198, 579
- Education through research, Humboldt, 10, 84–85
- Eisner, E., 13, 28, 33, 36, 518–522, 526, 529, 540, 546
- Elliott, J., 33, 126, 177–186, 189, 392–394, 398, 461, 494, 576
- Emancipation, 79, 216, 259, 562
 - and context-transcendence, tensions, 177
 - educational values, 183
 - Enlightenment meta-narrative, human, 179, 184, 186
 - and rational criticality, 185
- Empirical philosophy, 12, 94, 99
- Empiricism, 14, 19, 49–50, 64, 380
 - mechanistic causes, 18
 - and realism, 376–377
 - refined forms, 157
- Enabling impact, 426, 435
 - decision makers, 587–588
 - democratic possibilities, 588
 - educational research process
 - active engagement, 589
 - open-access, 588
 - target audience, 589
 - education community, 588
 - knowledge enterprise, 589–590
 - politics influences, 587
 - “The New Openness in Educational Research”, 588
- “Enabling sciences”, 279
- Endogenous growth theory, 277, 278
- Enlightenment, ethics and spirituality, 131, 158, 180, 217, 222, 239, 298, 321, 464
 - knowledge and truth, 86
 - master and pupil, 88
 - morals and morality, 86
 - ‘oppressive dogmatism’, 86
 - relation and attitude of care, 88
 - self-mastery, 88
 - spiritual tradition, 87
 - ‘technologies of the self’, 87
- Enquiry, 32–34, 36–38, 41, 59, 78, 473
- Environmental
 - collaborations, 571
 - education, epistemology
 - environmental education, 569
 - multi-layered work, 569–570
 - university, 570
- Epistemic community, 7, 35
 - education researchers, 6
 - groups and groupings, 124
 - relationship, knower and known, 125
- Epistemology, 159, 241, 242, 457–463, 569, 584. *See also*
 - Dual epistemology revisited and academic disciplines
 - Lakatos, 48
 - neo-liberal and neo-Marxist views, 48
 - political interest, 48
 - positions, 47–48
 - application, 428
 - certitude, 119
 - commitments, 426
 - criterion, 428–429
 - dimensions, 426
 - fallibilism, 428
 - foundational disciplines, 103
 - judgement, 431
 - knowledge claims, researchers, 428
 - parasitic, 429, 430
 - philosophical domain, 102
 - and professional judgment, evidence-based practice
 - actions and consequences, 396
 - democratic society, 397
 - Dewey, 395
 - dualism, 395
 - epistemology, 396
 - inquiry process, 396, 397
 - knowledge, 394–396
 - moral, 394
 - pragmatic technology, 396
 - sound evidence, 394
 - symbolic resources, 395
 - trial and error, 395
 - quality, research texts, 426
 - research quality and legitimacy
 - companion, 365
 - discourses, 367
 - exploration, 366
 - knowledge, 366
 - modern science, 365
 - moral and ethical representation, 367
 - perspectives, 366–367
 - postmodern approaches, 366
 - poststructural approaches, 366
 - self-consciousness, 365
 - social construction, 365–366
 - social interests, 366
 - scepticism, 428
 - special education, 417, 419
 - synthesis, 119
 - truthfulness and validity, 429
- Ethical approval procedures, 422
- Ethical code, 37, 459–460
 - academic and virtues, 474
 - external institutional development, 473
 - intellectual virtues, 474
- Ethical obligations
 - research journals, 472
 - traditions, 473
- Ethics, research, 80–81, 178, 241, 289–291
 - academic careers, 458
 - Australian Code, 459
 - British Educational Research Association, 459
 - committees, 461–462
 - communicative action, 457
 - communicative action and space, 465

- Ethics (*cont.*)
- complexity, 461
 - concepts, participation, 465
 - creativity, 285
 - critical participatory action research, 462
 - democratisation, evaluation, 460–461
 - educational research, 457
 - epistemological, 458
 - ethical dilemmas, 466–467
 - features, public spheres, 466
 - governmental epistemology, 285
 - John Dewey, legacy, 460
 - objectification of experience, 463
 - participation and conditions, rigor, 465
 - participation and implications, 461
 - participatory action research, 462
 - perspectives and research implications, 462
 - political, 458
 - principles
 - confidentiality, 459
 - consent, 459
 - deception and secrecy, 459
 - harm, 459
 - subjectivity, 284, 464
- Ethics and research, 90
- Evaluation of education, 33, 43, 355, 396, 403–404, 460–461
- individual studies, 174
 - program and policy, 175
- Evidence, 38, 138, 209–212, 437. *See also* Best evidence synthesis (BES)
- articles, 197
 - “best evidence” methods, 202
 - effect sizes, 205
 - evidence-based decision making, 203
 - PBM, 359
- Evidence-based approaches, 210, 392, 412
- Evidence-based practice, 52, 216, 272, 411
- assumptions, 392, 398
 - critics, 402
 - democracy, 398–399
 - democratic and deliberative approaches, 401, 404
 - development, 401
 - educational research, 391
 - evaluation, 403–404
 - judgments
 - and deliberation, 398
 - normative, 398
 - meanings, 392
 - place, educational decision-making, 402
 - and policy, 398
 - positivistic assumptions, 392
 - professional action, 393–394
 - professional judgment and epistemology, 394–397
 - public services, 401–402
 - rationality and self-interest, 401
 - RCTs, 403
 - reflections, 403
 - relationship, 398, 402
 - roles, 392, 397–398
 - scope, 392
 - stakeholder engagement, 404
 - and teaching, 391
 - teaching and learning, 403
 - technocratic model, 392
 - transactional theory, professional knowledge, 402
 - transformation, 391–392
 - “What Works”, 402
- Evidence for Policy and Practice Information and Coordinating Centre (EPPI), 412
- “Evidence in judgement”
- domain-specific, 428
 - epistemic
 - criterion, 428–429
 - scepticism, 428
 - fallibilism, 428
 - hypothesis, 428
 - knowledge, 428
 - making, 427
 - piece of research, 427, 428
 - soundness, 428
- “Experimental attitude”, 12, 91, 99
- Experimental design. *See* Quasi-experimental designs (QXTs)
- Expert witnesses, 124, 146
- F**
- Fallibilism, 22, 131, 150, 379, 380, 383, 428
- Fictional character, preface
- description, 549
 - dialogue
 - narrative research writing, 552
 - setting, 549–550
 - writing fiction, 552
 - narrative researchers, 549
 - online discussions and assignments, 549
- Fiction and truth in education research
- academic writing, 540
 - challenges
 - boring, 542–543
 - elements, good stories, 542
 - postmodern fiction, 543–544
 - conventional journalism, 540
 - craft and art, narrative discourse, 545
 - description, 539
 - educational research, 539
 - goal, fiction writing, 542
 - human beings, 541
 - narrative research, 541
 - qualitative research, 546
 - representation form, 547
 - resources, 546
 - school, 542
 - story, interpretation and discourse, 541
 - teaching process, 542
 - value, 541
 - wisdom, 540
- Fine, M., 304, 307, 452–454, 461, 570
- Fixed effects model, 203
- Flyvbjerg, B., 56, 57, 64, 131, 132, 409, 414
- For-the-sake-of, 9, 181, 194, 240, 315, 543
- Foucault, M., 18, 34, 37, 38, 42, 84–93, 98, 119, 124, 126, 127, 131, 233–235, 240, 243, 260, 285, 298, 307, 322, 323, 419, 443–449, 452, 501, 504
- as an “interpretative strategy”, 230
 - concept of Panopticon, power and knowledge, 229–230
 - eclectic use, 230
 - and education policy, 216
 - and educational psychology (*see* Educational psychology, Foucauldian approach)
 - genealogies, education, 219–221
 - governmentality and genealogy, 231
 - ideas, disciplinary power, 230–231
 - neoliberal governmentality, 223–225

- and personal autonomy, 221–223
and post-structuralism, 215–216
qualitative reading, 229
study, lifelong learning, 229
- Foundationalism, 62, 185, 369, 377, 378, 388
- Freud, S., 16, 218, 233, 312, 323, 348
- Freire, P., 14, 250, 256, 492, 494, 539, 562
- Furlong, J., 425, 426, 430, 431, 435, 436
- G**
- Geisteswissenschaften*, 76, 157
- GEM. *See* General elimination methodology (GEM)
- Genealogy, 86, 131, 219–221, 240, 243, 304, 320–325
disciplinary and pastoral power, 230
and ethics, 230
use, journals, 231
- Genealogies of education
Christian pastoralism, 221
constructivist/reproductive process, 220
critique of multiple personality theory, 221
regulation, effects of power, 219
social determination, subjectivity, 220
technologies, governing children, 220
- General elimination methodology (GEM), 167, 168, 175
- Generalizability, 36, 126, 131, 133, 136, 175, 245, 320, 355–356, 452, 506–508
- Geomorphic shifts
foreign aid policies, 337
globalisation, 337–338
government reductions, 337
performativity, 337
technology, 338
- Giroux, H., 34, 215, 216, 252, 492, 494
- Global assemblage. *See* Knowledge economy
- Globalisation, 94, 98, 102, 293, 501
anxiety, 283
creativity, 283, 284
global networks, 283, 284
international and comparative education, 337–338
representation, economic prosperity, 284
subjectivity, 284
- Gold standard, 14, 17, 22, 35, 52, 68–69, 104, 105, 129, 133, 160, 164, 170, 205, 392, 490
nature of science, 137
platinum standard, 138
RFTs (*see* randomized field trials (RFTs))
rules, 175
science, 134–135
- Governmentality, 216, 221, 223–225, 297, 307, 443
conceptualization, creativity, 283
Foucault's work, 230, 231
governing powers, 282
inquiry shifts, 282
Guba, E., 13, 368, 381, 403, 426, 569, 571
- H**
- Habermas, J., 84, 177–186, 224, 229, 250, 251, 457, 463–466
- Hammersley, M., 55, 62, 325, 326, 342, 343, 347–352, 367, 368, 381, 382, 387–389, 392, 393, 398, 402, 407–411, 426–427, 429, 431, 434–438, 491
- Haraway, D., 242, 306, 570
- Hargreaves, D., 130, 159, 272, 363, 392, 401–403, 438, 491, 492
- Hattie, J., 197–206, 209–212
- Heidegger, M., 20, 119, 126, 193, 195, 245, 578
actualization, capability, 194
enactment, 195
- Highly-interactive paradigm (HIP), 168–169, 174
- HIP. *See* Highly-interactive paradigm (HIP)
- Hirst, P., 32, 41, 49
- Historical trends
bounded systems, 492
complexity, richness and messiness, 492–493
Critical Race Theory, 494
criticisms, 491
democratic frameworks, 496
educational research, 490
empirical realism, 495
Enlightenment, 493
ethnography, 493
“European age”, 239
human social activities, 489
instituted forms, government, 490–491
ontological commitments, 490
political-economic forms, 493
politics, representing research, 490
psychological/social domain, 495–496
public space, 495
representing, education realities, 492
school effectiveness and improvement, 491
socialization, 490
voices, education, 494
- Hodkinson, P., 161, 307, 367, 372, 388, 407–415, 417–419, 435
- Holistic approaches, 70
- Howe, K., 52, 69, 160, 404
- Human involvement, truth, 8, 54
creative rethinking, 62
cultural moment, 63
educational research, 63
empiricism, 64
foundationalism, 62
human culture, 63
human nature, 62
love, justice and pity, 63
practitioner's investment, 61
responsiveness and responsibility, 64
symbolic mediation, 63
traditional discourses, 65
- Humboldt, 10, 84–85
- Hume, D., 18–20, 78, 126, 165, 190, 474
- Hypertext, 485, 544, 545
dissertations, 570
and multimedia, 572
technologies, 571
- I**
- Identities, 222, 264, 265, 303, 410, 446, 480, 485, 492, 534.
See also Temporality and identity
place, 534
politics, 499, 501
- Imagination, 3, 63, 64, 75, 99, 109, 184, 268–270, 274, 540–542, 545, 556
- Immanent transcendence, 126, 183, 186
action research, 190
Aristotle's philosophy, 191
educational action researchers, 189
post-modernism and modern complexity theory, 189
restricted localism/abstract idealism, 190

- Impact, 5, 42, 78, 98, 126, 200, 210, 215, 218, 295, 312, 335, 341–345, 357, 378, 392, 426, 429, 430, 436, 437, 449, 451, 453, 484, 486, 496, 508, 515, 516, 575, 577
 international and comparative education, 335
 quality criteria, educational research, 435
- Improving education, 68, 69, 168, 334, 342, 346–351, 403, 411, 490–491
 evidence-based approach, 210
 Iterative BES programme, educational processes, 211
- Innovation systems, 89, 94, 201, 205–206, 269, 278–279, 403, 412
- Inquiry, 27–30, 85, 90, 124, 126, 130, 133, 146, 182, 212, 342, 345, 347–349, 354–355, 365, 366, 376, 377, 382, 389, 446, 451, 480–482, 484–486, 506, 509–510, 516–530, 541, 549, 557, 577, 579
 cartographical forms, 534
 hybrid form, 534
 methods
 art of inquiry, 16
 qualitative and critical forms, 14
 qualitative inquiry, 15
- Inscriptions, 312, 483, 513–515
 case materials, 505
 comparative tests, 509–510
 comparison table, 510–511
 complex forms, learning, 510
 continuum, 503, 514
 constructivist learning, 507–508
 correlation matrix, 508
 correlation *vs.* causation, 508
 data table, 506
 educational research, 506
 ethnography, 503, 505
 field notebooks, 509
 prosody and emotion, 511
 “quantitative” and “qualitative” distinction, 503
 social semiotics, 503–505
 student achievement, 508
- Intellectual virtue and ethical codes, 471–474
- International and comparative education, 245, 319–330, 337
 advantages, 338
 communications, 334
 conceptualization
 analyses, 335
 framework, 334–335
 literature, 335
 nonlocational demographic dimension, 335
 definition, 333, 334
 description, 333
 differences, 334, 336
 geomorphic shifts (*see* Geomorphic shifts)
 impact, 335
 literature review, 336
 review, 334
 terms and meaning, 333, 334
- International education, 139, 320, 333–338
- Interpretive research about education, 244, 458, 463, 486–487, 504
 Anglophone empiricist tradition, 77–78
 causation conceptions, 78
 description, 77
 postmodern ethics, 80–81
 pragmatic tradition, 78
 semiotic and evolutionary commitments, 78–79
- J**
- Journals, xx, 32–34, 52, 132, 198, 203, 229, 410, 579–581, 583–585, 590
 special education, 417–418
- Judging theories
 behaviourist hypotheses, 48
 Lakatos, 48. *See also* Lakatos, I
 neo-classical economics, 48
 preparing researchers, 49
- Justice, 63, 65, 75, 190, 315–317, 483, 493, 500
- K**
- Kalantzis, M., 10, 101–114, 117–120
- Kaleidoscopic text, 123, 127, 484, 517, 518, 520, 522–525
- Kant, I., 17–19, 22, 90, 126, 182, 190, 220, 222, 240, 247, 248, 250, 260, 490, 495
- Kapitzke, C., 244, 281–286, 289–291, 297–299
- Kaupapa Māori research, 501
- Kemmis, S., 126, 177, 193, 194, 346, 462, 466, 468
- Knowing, ways of, and representation, 484, 517–530
- Knowledge, 4, 10, 14–17, 20, 32, 35, 42, 43, 49–50, 55, 83–94, 99, 102, 106–114, 118, 155, 156, 202, 212, 242, 269–270, 272, 274, 277, 281, 347, 349, 358–359, 377–380, 382, 388–389, 395, 396, 403, 404, 419, 425–431, 452, 464, 480, 483, 486, 490, 504, 518–520, 526, 527, 556, 560, 576
 dominant paradigmatic, 570
 generation and dissemination, 573
 normative assumptions, 571
 and research (*see* Criterial judgements)
- Knowledge based/orientated education research, 86, 89–90, 93–94, 401, 418
- Knowledge concepts, 14, 19
 behavior, 15
 “creep”, 587
 critical social knowledge, 15–16
 human activities, 16
 positivist research, 15
 qualitative inquiry, 15
 technical and practical, 14–15
- Knowledge cultures, 20, 28, 286
 education research, 589
 production, 590
 values, 588
- Knowledge economy, 42, 114, 244, 267–275, 283, 491, 500
 biologization/neurologization of learner, 273–274
 commodification of education, 274
 concentration, space of assemblage, 278
 CPE, 277
 discourse, 278
 endogenous growth theory, 278
 modernization of education in twenty first century, 271–272
 global variables, 277–278
 personalization and “prosumer”, 272–273
 policies, 279
 radical reorganization, 270–271
 Schumpeterian evolutionary economics, 278–279
 “scientization”, teachers’ knowledge, 272
 technological change, 278
- Knowledge enterprise
 academic leaders, 590
 communications, 589
 educational research, 589
 university libraries, 589
- Knowledge/power, 6, 38, 241, 243, 504

- Knowledge society, 42, 84, 94, 114, 298–299, 483
 Korteweg, L., xxviii, 485, 559–565, 569–573
 Kuhn, T., 14, 18–20, 28, 49, 80, 130, 146, 161, 242, 364, 377, 380, 491, 500
- L**
- Laclau, E., 177, 185–186, 493
 Ladson-Billings, G., 244, 248, 259–261, 264, 295, 501
 Lakatos, I., 18–20, 48, 49
 Lather, P., 124, 130–132, 135, 160, 161, 215, 216, 305, 365, 369, 371, 381, 444, 445, 448, 451, 485, 520, 522, 524, 562, 564, 570
 Legitimizing education research, 5, 35, 49, 160, 218, 363–373, 407–415, 417–419, 421–424, 451–454, 517–518, 526–528, 575
 definition, 443
 disagreements, 446
 emancipatory research, 444
 empiricism, 446
 feminist presence, universities, 444
 institutional technologies, 449
 language practices, 449
 liberal humanist approaches, 448
 numerical claims, 447
 positivism, 444
 post-critical and post-realist research, 446–447
 post-realist research, 444
 poststructuralist forms, 444–445, 448
 provocative/provoking (*see* Provocative/provoking legitimation)
 “recuperating empiricism”, 445
 relations of power, 445
 research writing, 443
 technologies, research practice, 449
 Leonardo, Z., 244, 247–256, 258–261, 263–265, 316
 Leggo, C., xxviii, 484–486, 539–547, 549–552, 555–557
 Levinas, E., 20, 23, 87
 Lifelong learning, 216, 271
 analysis practices, 230
 governmentality, research, 231
 ideas, disciplinary power, 231
 Lifeworld, 105, 109–113
 instantiation, 119
 knowledge, 118
 and science, 119
 “Limit experience”, 92, 107, 234, 235, 250
 List of possible causes (LOPC), 167, 168
 Literature reviewing, 336, 552, 572
 limitations, 202
 meta-analyses, 206
 problems, meta-analyses, 201
 researchers, 197
 LOPC. *See* List of possible causes (LOPC)
 Lyotard, J.-F., 9, 43, 77–81, 87, 119, 131, 368
 adoption, language, 79
 language game, 79
 solipsism, 80
 Wittgensteinian language game, 80
- M**
- Macropolitics and education research, 367, 397, 417, 419
 EPPI reports, 412
 ESRC, 411
 evidence-based practice, 411
 funding, 412
 government pressures, 411–412
 governments and politicians, 411
 and micro politics, 412–414
 political engagement, 411
 RAE, 412
 social science, 411
 TLRP, 412
 Mainstream education scholarship, 260
 Mapwork as research method, 484, 533–536
 Marxist theory, 18, 33, 48, 49, 126, 190, 216–225, 229, 233, 242, 248, 249, 251, 255, 291, 323, 336, 419, 438, 490, 493
 Neo-Marxist, 15, 48, 49, 223, 233, 234, 240, 326, 327
 Mason, M., 245, 319–330
 “Master discourse”, 245, 282, 293
 McKenzie, M., 245, 301–308, 311–313, 315–317, 371, 570
 McTaggart, R., 127, 367, 453, 457–468, 471–474
 Memory, 87, 169, 312, 556
 and narrative, 304–305
 Nietzsche, 243
 youth and researcher narrative, 302
 Mentors, 16, 27, 110, 485, 557
 Meta-analysis of education
 articles, 197, 198
 basics, 198
 behavioral objectives, 200
 “best evidence” methods, 202, 210
 BRD, 205
 calculation, effect size, 199
 continuum, effects, 199
 determination, studies, 198–199
 disadvantages, 203, 204, 359
 evidence-based decision making, 203, 210
 financial costs, interventions, 205
 generalizability, studies, 163, 205
 identification
 moderators, 201
 problems, 198
 magnitude and statistical significance, 199, 211
 “quality studies”, 163, 204, 205
 randomized trials, 20
 student achievement, 197
 studies, reciprocal teaching approaches, 210
 synthesization, 201–202
 traditional fixed effects and random effects models, 203
 value, inferential statistics, 203
 Metaphor in research, 20, 62, 74, 125, 253, 312, 320, 389, 523–525, 562, 577
 Method, 4, 8, 32, 33, 54, 59, 79, 105, 123, 129–139, 141, 155, 307, 366, 369, 371
 qualitative, 160
 RCT, 159
 research, 160
 Methodology, 4, 33, 78, 80, 102, 124, 130–135, 245, 260, 268, 319–330, 364, 366, 463, 569
 PBM, 354
 research-practice gap in education
 general features, 178, 245, 343, 353, 357, 391, 467
 nature of practice, 343–345, 353, 358
 theories of action, 345–346, 355
 research quality and legitimacy, 364
 youth (*see* Youth studies)
 Method/ology wars and research paradigms, 14, 20, 159
 causal reasoning, 18
 practical experience, 17
 rationalist theories, 17–19

- Micropolitics, 71, 367, 397, 408, 413, 417, 419
 common assertion, 410
 dispositions and identities, 410
 formalised structures, 410
 and macropolitics, 412–414
 processes, 411
 professional identity, 411
 publication, 410–411
 research legitimization, 410
 struggles, 410
 technical standards, 411
- Mixed methods research, 19, 23, 52, 126, 170, 402, 403
- Motivation, 146, 177, 181, 272, 312, 402, 504
- N**
- Narrative inquiry, 364, 368, 516, 534, 543, 545, 549, 552, 557
- Narrative research, 329, 371, 485, 528, 541, 546, 550, 552, 570
- Nativity, 120
- National culture, 245, 327
 discourse, 322
 generalisation, 324
 geographical constraints, 324
 globalization, 325
 and identity, 323–324
 pre-modern societies, 322
 subject, 322
- National Research Council (NRC) report, 14, 68, 141, 145, 160, 414, 433, 445, 447
 “guiding principles”, 133–134
 nature of educational research, USA, 132
 RFTs, 133
- Nature of science, 129, 137
 randomized controlled experiments/field trials (RFTs), 132
 social and educational contexts, 132
- Neoliberalism, 42–44, 221, 223–225, 285, 443, 445, 447, 450
- Neo-pragmatism values, 182, 190, 379, 381
 colonialism, 182
 philosophy, education, 183
- Neorealism, 379–380, 382, 383
- New Babel, 129–130
- New Growth Theory, 269, 278
- Newtonian mechanics (NM), 147, 161
- New Zealand Association for Research in Education (NZARE), 50
- New Zealand, neoliberal reform of education policy, 42, 209, 222, 274, 358
 Performance Based Research Fund (PBRF), 43
 performance-based research funding schemes, 43, 211, 359
- NM. *See* Newtonian mechanics (NM)
- Noddings, N., 23, 126, 453
- Nolan, K., xxviii, 484, 517–530, 533, 569, 570, 572, 573
- Normativity in education research, 54, 55, 62, 131, 261
- Novels and autobiographies, 33, 138, 283, 284, 306, 556–557
- NRC report. *See* National Research Council (NRC) report
- O**
- Oakeshott, M., 4, 13–23, 28
- Oancea, A., 53, 434, 435, 437
- Obligation, democratic principles, 472
- Olssen, M., 126, 131, 215–231, 233–235, 332, 444
- Online publishing, 580, 584
- Ontology, 19, 90–93, 217, 218, 268, 286, 294, 367
 collective, 369
 crisis of legitimization, 365
 epistemology, 366
 realist, 365, 369
- “Ontology of ourselves”, 223
 “de-subjectivation”, 92
 education, 92–93
 ethical transformation, 90
 philosophical life, 91
 sexuality, 90
- Open access research initiatives, 579–581, 584
 description, 579
 journals, 581, 584
 movement, 583
 policies, 580
- Open journal system (OJS)
 academic disciplines, 585
 internet, 583
 open source software system, 583
 software project/movement, 584
 user, 584
- Oral history, 304, 312–313, 572
- Outcomes, 17, 54, 56, 63, 72, 76, 198, 199, 204, 290, 346, 356, 403, 412, 483, 486, 492, 513
 outcomes-linked evidence, 211
 school leadership, 211
 student, 210, 211
 valued, 209
- P**
- Papastephanou, M., 126, 127, 177–187, 189–191, 193–195, 216
- Paradigms, 14, 17–19, 27, 28, 52, 132, 159, 248, 285, 335, 336, 364, 479, 483
- Participatory action research, 303, 316, 451, 454, 463–465, 467, 471, 473
 ethical commitments, 462
 evaluation, 457
 features, 462
 forms in studies of education, 461
- PBM. *See* Problem-based methodology (PBM)
- Pedagogy, 23, 92, 178, 216, 252, 256, 291, 371, 444, 484, 492, 494, 562
 analysing, 112
 applying, 112–113
 conceptualising, 111–112
 definition, 110
 experiencing, 111
 learning activities, 110
 lifeworld experience, 110
- Performative intervention, 76
- Performing education research
 common sense, 577–578
 epistemological sense, 578
 publications, 577
 scientific precision, 579
 WWC, 578–579
- Personal experiences, 20, 89, 93, 155, 203, 241, 264, 272, 273, 312, 315, 430, 481, 486, 495, 521, 525, 549, 550, 556
- Personal autonomy and education
 Foucauldian analysis, liberal education principles, 221
 governmentality effects, 222
 human sciences, 222
 “individualization-totalization” spectrum, 223
 neo-liberal notion, autonomous chooser, 222
- Peters, M., 11, 42, 86–89, 114, 128, 216, 222–224, 239–246, 248, 284, 366, 368, 369, 372, 583, 588
- Peters, R., 32, 49, 221, 233
- Phillips, D.C., 18, 125, 129–139, 141–143, 159, 342, 350, 366, 412, 437, 439, 540
- Philosophy, 8, 10, 12, 21, 28, 32, 41, 49, 52, 69, 74, 80, 84, 93, 94, 99, 104, 118, 145, 191, 241, 242, 377–378, 403, 473

- Philosophy of education, 32, 72, 79, 83, 90, 94, 119, 131, 181, 439
Allgemeine Bildung, 93
 ethical transformations, 94
 Humboldt's project, 93
 "knowledge-based deontology", 94
 "knowledge society", 94
 and social science, 377–378
- Philosophy of science, 132, 146, 156, 160, 354, 377, 439, 500
- Photographs, 504, 513–516, 534, 535, 537
 prevalence and function, 514
 science textbooks, 514
 structuring work, 515
 translation work, 515
- Place, 12, 16, 43, 70, 84, 98, 103, 165, 171, 199, 225, 264, 301, 302, 305, 316, 533, 534, 555, 556
- "Platinum standard", 129, 138, 141–143
- Poetic inquiry, 547
- Policy, 14, 23, 27, 42, 76, 118, 136, 164, 201, 211, 225, 245, 251, 278, 281, 285, 289, 341–343, 348, 351, 357, 401, 572
 abstractions, 279
 knowledge economy, 277
 perceptions, 279
 supranational and nation states, 279
- Politics, 16, 21, 28, 44, 49, 80, 114, 130, 217, 218, 222, 311, 493, 573
 identity, scholar, 501
 participation, 464
 philosophical sense, 500
 symbolic and socio-political levels, 499
 traditions, 501
 "universalism" and "relativism", 500
- Politics of education research, 343, 413, 449, 458, 459, 479
 academic journals, refereeing and publication, 417, 418
 assumption and control, 408–409, 419
 conservatism and governmental regimes, 419
 dispositional, 409–410
 educational policy and practice, 409
 ESRC, 407
 fragmentation, 417
 government funding, 407
 habitus, 409, 417
 legitimation, 407, 408, 417
 macro and micro politics, 408, 410–414, 419
 objectivity and relativism, 407, 408, 418, 419
 RAE, 407
 relationship, 407
 researchers, 407–408
 rigor, 407
 social sciences, 408, 417, 419
 special education and society, 418
 value-neutral, 407
 victims, 419
- Polkinghorne, D., 9, 72, 480, 520
- Popper, K., 18, 55, 68, 79, 146, 147, 150, 152, 161, 241, 428
- Positivism, 13, 14, 18, 19, 27, 131, 370, 377, 387
- Post-critical education research, 364, 372, 448, 451, 481, 482
 deconstructive, 444
 legitimation, 447
 and post-realist philosophers, 444
 and post-realist researchers, 446
- Post-disciplinarity, 34–35, 41, 267, 268
- Post-empiricist account of knowledge, 21
 Lakatosian structures, 49
 'testing' theories, 49
- Postmodernism, 79, 135, 184, 379, 381, 419
 within education research, 184–186
 definition, 179
- Post-realist education research, 443–448, 451–453
 legitimation, 447
 philosophers and researchers, 444, 446
- Power, 16, 21, 23, 27, 28, 38, 42, 44, 80, 88, 131, 150, 203, 204, 219, 249, 251, 256, 264, 307, 348, 380, 383, 419, 427
 explanatory, 244
 individuals, 494
 and knowledge, 243
 manipulation, 268
 relations, 240–241, 243–244
 structures, 233
 and subjectivation, 234–235
- Power hierarchy, 472
 classroom environment, 472
 description, 471
 educational research, 472
 research participants, 472
- Power/knowledge, 38, 221, 231, 234, 243
 Foucault's concept, 230
 motivational theories, adult education, 229–230
- Practical judgement, 64
- Practical roles of education research, 392, 397–398, 451
- Practices in thought, 99, 124, 449
- Pragmatism, 14, 22–23, 103, 190, 241, 396, 397
- Pring, R., 5, 8, 27–30, 53, 380, 382, 391, 434, 437, 438, 474
- Problem-based methodology (PBM), 245, 341–352, 357
 development, 342, 353
 educational research and problems, 343, 353
 features, 348, 353, 357
 generalizations, 355–356
 nature of methodology, 354
 research and practice (*see* Research and practice)
 research-practice gap (*see* Research-practice gap)
 research problems, 348, 354–355, 359
 theory appraisal, 350, 355
- Problem solving, 20, 201, 343, 346, 350, 351, 354, 359, 395, 396, 402, 404
- Provocative/provoking legitimation, 451, 526
 catalytic validity, 209, 451, 452
 educational/social research, 453
 indigenous communities, 452
 practices of recuperation, 453
 practices of repatriation, 453
 "theorizing back", 454
- Pursuit of knowledge and study of education, 16–17, 42, 148
 art of thinking, 16–17
 "intimations of excellence", 17
- ## Q
- Qualitative-quantitative distinctions, 9, 152, 507, 510, 513
- Qualitative research, 27, 71, 72, 159, 170, 381, 382, 408, 436, 480, 487, 492, 500, 506, 517, 519, 546
 and policy, 403
 politics and legitimacy, 422, 423
 and quantitative, 69–72, 160
- Quality criteria, 127
 academia, 434
 changes, social science, 377–378
 confidence, 375, 376
 criticisms, 434
 description, 375
 dissemination, 433
 economics, 440
 empiricism and realism, 376–377
 equating, 161

- Quality criteria (*cont.*)
 framework
 analysis, 435
 domains identification, 435
 fourfold aims, 434–435
 impact, 435
 intrinsic and extrinsic worth, 435
 OECD elements, 435
 intellectual and cultural life, 376
 internal and external
 assessment, 437
 evaluative judgments, 436–437
 excellence, 435–436
 hierarchy determination, 437
 impact, 436
 measures, 436
 validation, 436
 value, 437
 “interpretive sociology”, 377
 judgments, 375, 381–383
 low, 433
 management, 439–440
 negative evaluations, 434
 neorealism and relativism, 379–380
 orthodoxy, 376
 perspective, 376
 philosophical disputes, 376
 philosophy, 439
 practitioners and policy makers, 434
 procedures, 375
 quantitative approach, 439
 reality, 376
 rediscoveries, Marie Curie, 439
 and relevance, educational research, 159
 research, characterization, 127
 risk, 440
 scientific method, 376, 377
 social inquiry, 376
 Quantitative methods, 403, 500
 objective analysis, 142
 physical sciences, educational research, 141
 Quantitative research, 19, 52, 152, 170, 436, 491, 500, 501, 504
 and qualitative, 69–72, 160
 scientific approach, 159
 Quasi-experimental designs (QXTs), 68, 167–169, 174
 Quasimodo and inquiry
 “against methodolatry”, 8
 educational analysis, 9
 Quine, W., 7, 19, 20, 48, 49, 490, 491
 QXTs. *See* Quasi-experimental designs (QXTs)
- R**
- Race, 244, 250, 251, 261, 263, 264, 316
 abstraction, particularity, 253
 criticality, 252, 253
 critical project, 248
 CRT (Critical Race Theory), 248, 259
 inequality, 260
 dialectics, pedagogy, 252
 immersion and abolition, 254–256
 inter-minoritarian relations, 253
 Marxist theory of race, 249
 racial minorities, 254
 racial oppression, reality and liberation, 249–252
 and racism, 260
 as “sliding signifier”, 259
 social theory, 247
 “Radicalness” of Foucault’s work, 44, 233, 248
 Ramaekers, S., 8, 10, 51–59, 61–65
 Random effects model, 200, 203
 Randomised controlled experiments (RCE), 27, 68, 104, 206, 473
 Randomized controlled trials (RCTs), 164, 169, 170, 175, 249,
 392, 396, 403
 advantages, 166–167
 funding, research streams selection, 173
 “gold standard”, 160
 hypothesis testing statistics, 174
 lack of, 160
 language, 173
 limited position, 168
 “limited RCT position”, 173–174
 Randomized field trials (RFTs), 14, 70, 132–134, 392, 396
 definition, 133
 “gold standard”, 129
 model, circulatory system and systematically testing, 136
 platinum standard, 138
 supporters, gold standard, 136
 RCE. *See* Randomised controlled experiments (RCE)
 RCTs. *See* Randomized controlled trials (RCTs)
 Reader response, 61, 541
 Realism, 248, 369, 376–382, 495, 515
 and empiricism, 387, 388
 internal, 388
 Reflexivity, 520
 contemporary researcher, 483
 socio-cultural representation, 482
 Relational concepts, 264
 Relativism, 14, 19, 20, 56, 79, 80, 379, 381–383, 418, 419, 500
 and scepticism, 388
 self-refuting paradox, 389
 validity, 389
 Repatriation, 454
 components, 453
 methodology, 453
 Reporting educational research
 AERA guidelines, 577
 transparency metaphor, 577
 Representing education research, 19–21, 33, 70, 87, 110, 252, 302,
 304, 307, 311, 338, 370, 481–484, 486, 490–493, 499, 504,
 513, 515, 533, 569, 575, 576, 578–580
 academic considerations, 565
 arts-based, 517
 clarity and simplicity, teaching, 522–523
 colour, use, 524
 concept of resonance, 528
 educational research community, 529
 educational research methodologies and representation, 528
 equality, 493
 first-generation internet, 560
 graduate researcher, 564
 historical narratives, 518
 institutional tensions and complexities, 564
 interpretation, qualitative inquiry, 519
 kaleidoscopic academic text, 525
 kaleidoscopic performative research-writing, 520
 language, research, 521
 Lather’s praxis 1.0, 2.0, and 3.0, 562
 learning environment, 526
 learning, mathematics and science, 521

- legitimation, 526–527
- mathematics and science education, 518, 525–526
- metaphor, kaleidoscope, 523
- music video-blogs, 563–564
- performative and constructivist research, 520–521
- performative research text, 526
- “plain speaking”, 522
- political significance, 491
- public engagement, education research
 - accreditation process, 562
 - digital representations, 561–562
 - orthodoxy and dogma, 561
- public intellectual, 563
- public quality, 576
- readers and scholars, 522
- representative, 576
- research and learning, 519–520
- research-writing, 517
- scholarly communication 2.0 and 3.0, 565
- slash space, learning, 524–525
- social networking, 559
- social realities, 490
- social sciences, 563
- sub-conscious belief, 529–530
- teachers’ experiences, school, 523
- theory, 563
- traditional methodologists, 518–519
- universities, 561
- version, empirical situation, 562–563
- voice, 494
- Web 2.0, 559–560, 564
- Web 3.0, 561
- Research, 3, 7–13, 32, 36, 38, 48, 49, 52–54, 56, 58, 59, 64, 79, 80, 133, 138, 159, 160, 178, 179, 286, 409–411, 435, 436, 459
 - and education
 - knowledge, 83
 - ‘non-argumentative’, 84–85
 - process and practice, 83–84
 - self-education, 84
 - students and society, 84
 - university, 84
 - as education
 - as “art” more than “science”, 5
 - challenges, 5–6
 - “qual vs. quant” discourses, 4
 - teaching materials and instructional experiences, 4
 - methods, 152
 - paradigms, 4, 5
 - problems, 354–355
 - quality criteria (*see* Quality criteria)
 - representations, 570
- Research and practice gap in education, 83, 345, 449, 482, 484, 546
 - complexity and inconsistency, 342
 - compromise validity, educative intent, 348
 - differences, 351
 - educative intent
 - development and theories of action, 347–348
 - educational policy, 342
 - explanations, 342
 - impact, policy and practice, 341
 - learning conversations, 350–351
 - methodological reasons (*see* Methodology)
 - methodologies, 341–342
 - generalisations, 351
 - non-compromise validity
 - accuracy, 348–349
 - coherence, 349
 - effectiveness, 349
 - evaluation, 348
 - improvability, 349–350
 - oxymoron, 346–347
 - PBM, 342
 - politicisation, 342–343
 - practice gap, 341, 342
 - Research assessment exercise (RAE), 34, 43, 337, 407, 412, 436, 440
 - Research generalizations, 353, 355–356
 - Research legitimacy. *See* Research politics and legitimacy
 - Research methodology, 33, 36, 100, 160, 387, 418, 492, 518, 528, 541
 - anthropological, 326
 - cross-cultural educational research, 328–330
 - phenomenological studies, 327
 - politics (*see* Politics of research)
 - tension, 326
 - Research politics and legitimacy, 408, 417
 - academics, 421
 - back-up strategies, 422
 - bias, 422
 - clinical education, 421
 - consequences, 423
 - educational processes, 423
 - electronic REC standard, 422
 - empirical, 421
 - ethical requirements, 424
 - generalisability, 422
 - healthcare and education, 421
 - masters course, 424
 - organisational risk management, 423
 - part-time courses, 421
 - power issues, 422, 423
 - pragmatics, 422
 - qualitative, 422
 - risk, 422
 - social sciences, 423
 - Research-practice gap in education, 342–346
 - communication, 358
 - compelling analysis, 359–360
 - description, 357
 - evidence, teaching practices, 359
 - knowledge, 358–359
 - policy relationships, 358
 - problem solving, 359
 - Reading Recovery approach, 358
 - regional levels, 358
 - Research quality, education, 69, 365, 375, 376, 378–383, 540
 - assessment, 389
 - epistemology, 388
 - foundation, 388
 - historical account, 387
 - issues, 387
 - judgments, 389
 - knowledge, 387, 388
 - macro-politics, 411
 - metaphors, 389
 - philosophical assumptions, 389
 - positivistic version, empirical realism, 387
 - reality and types of realism, 387, 388
 - relativism, 388, 389
 - self-refuting paradox, 389
 - time and place, 388–389
 - universal validity, 389
 - Research quality and legitimacy, 526–528
 - companion, 368
 - contextualization and indeterminacy, 368
 - crises, 363

- Research quality and legitimacy (*cont.*)
- discourse
 - communication, 364
 - companion, 364
 - contributions, 364
 - epistemological assumptions and principles, 364
 - epistemological diversity, 364
 - forms of inquiry, 364
 - knowledge, 365
 - methodological perspectives, 364
 - educational research, 363–364
 - epistemology (*see* Epistemology)
 - inquiry-focused interaction, 368
 - issues, 367
 - language games, 368
 - ongoing developments, 363
 - perspectives, 367–368
 - political acts, 363
 - social
 - construction, 369–371
 - and historical constructions, 369
 - standards, 369
 - strategies, 368
 - valuing, 371–373
- Research use, 194, 410, 428
- knowledge, 589
 - media technologies, 589
 - open-access publications, 590
- “Restorying through character”, 549–552
- RFTs. *See* Randomized field trials (RFTs)
- Rhetoric, 42, 137–138, 156–157, 173, 189, 194, 263, 480–481, 541, 542
- Richardson, L., 368, 518–520, 526, 540, 546, 557, 570
- “Rigorous educational research”, 133, 135
- Robertson, S., 244, 267–275, 277–279
- Robinson, V., 127, 210, 245, 341–360
- Rorty, R., 177, 181–185, 378, 379, 382, 389, 578
- Roth, M., xxvii, 483, 484, 503–516, 518
- Rule-governed activity, research as, 6, 36–37, 355
- Rules. *See* Rule-governed activity, research as
- S**
- St. Pierre, E., 14, 134, 141, 161, 216, 305, 365, 392, 445, 447, 487, 540, 546, 570
- Scepticism, 49, 59, 78, 80, 107, 388, 428, 495
- Scholarly communication
 - 2.0 and 3.0, 565
 - Web 2.0, 563
- Scholarly criticism, 264, 265, 584
- Schostak, J., xxvii, 483, 484, 489–496, 499–501
- Schwandt, T., 52, 68, 368, 381, 382, 408, 482, 562
- Science, 16, 52, 56–57, 68–70, 78–79, 107, 108, 113
 - “big science”, 119
 - description, 104
 - educational, 106
 - equation of quality, 161
 - fusion, abstract scientific and “focused” lifeworld knowledge, 119
 - inherent ambiguity, 118
 - meaning, 105
 - medical scientists, 105
 - non-empirical research, 160
 - vs.* non science, 161
 - philosophy, 160
 - psychology/cognitive, 117
 - “science of sciences”, 119
 - “Scientific educational research”, 124–126, 130–135
- Scientific method, 104
 - and confirmation, 149–150
 - monolithic, 143
 - RFT, 141
- Scott, D., 365, 367, 368, 425–431
- Scriven, M., 18, 126, 159, 163–175, 205
- Shavelson, R., 104, 363, 376, 377, 380, 433, 577
- Simons, H., 391, 392, 398, 404, 474, 494
- Simons, M., 10–12, 54, 58, 83–94, 97, 216, 223, 235, 285
- Situated knowledge, 304, 562
 - Feminist social and standpoint epistemology, 242
 - forms of resistance, 243–244
 - genealogy, 243
 - implications, “creativity imperative”, 244–245
 - power/knowledge, 243
 - use and interpretation, education research, 244
 - youth experiences and identities, 245
- Slavin, R., 160, 376, 381, 392, 393, 401, 402
- Smeyers, P., 8–10, 52, 63, 65, 78–80, 90, 158, 159
 - interpretive research, 77
 - problematization, 77
 - sound and compelling, 77
- Smith, A., 218
- Smith, J.K., 18, 365, 375–383, 387–390, 408, 409
- Smith, R., 52, 55, 56, 62, 126, 155–158
- Smith, L. Tuhiwai, 293–296, 307, 462, 464, 474, 481, 501, 569
- Social science, 34, 48, 57, 68, 69, 73, 74, 132, 153, 313, 334–336, 342, 375–377, 387, 408, 414, 417, 480, 487, 500, 552
 - differences, 438–439
 - educational action research and critical, 178–179
 - emancipation and context-transcendence, tensions, 177
 - false dualism, 438
 - interpretations, 438
 - late 1990s, 437
 - limitations, 439
 - medical analogy, 438
 - professional disciplines, 438
 - pure sciences and pursue scientific positivist approach, 437
 - qualitative and quantitative distinctions, 438
 - scientific method, 157
 - verstehen* element, 158
- Social semiotics, 483
 - educational research, 503
 - inscriptions, 503–504
 - numerical information, 505
 - population, 504
 - representational practices, 504
- Solidarity, 253, 254, 315, 316
- Sovereignty, 253, 295, 296, 453
- Space, youth studies, 311–314
- Stake, R., 13, 33, 56, 62, 63, 403, 408, 461, 464
- Stakeholder engagement, 211, 404
- Standish, P., 54, 58, 62, 87, 233
- Statistics, 13, 14, 23, 33, 74, 142, 152, 197, 200, 201, 205, 206, 354, 378, 444, 447, 453, 491–493, 500, 503–506, 508, 510, 516
 - calculation, effect sizes, 199, 200
 - “evidence”, 198
 - value, inferential, 203
- Stenhouse, L., 31, 33, 403, 473, 494
- Structures of power, 42, 44, 233
 - neoliberal reform, New Zealand, 42–43
 - Performance Based Research Fund (PBRF) portfolio, 43

- Subjectivity, 91, 93, 284, 311–313, 343, 376, 448, 450, 463, 464, 481, 482, 487, 491
 creativity, 281, 282
 “entrepreneurial enterprise education”, 281–282
 and power, 234–235
 self-developing subject, 233
- Subjugated knowledge. *See* Situated knowledge
- Synthesis. *See* Best evidence synthesis (BES)
- Systematic enquiry, 31, 32, 38
- T**
- Teaching and Learning Research Programme (TLRP), 412, 413, 491
- Techno-science, 279
- Temporality and identity
 changes, 313
 collision, 312
 inscriptions, 312
 motivation, 312
 narrative, memory and oral history, 312
 oral history, 312–313
 politics and subjectivity, 311
 schooling, 312
 sedimentation, 312
 socio-cultural and psychoanalytic conceptions, 312
 ‘spatial turn’, social sciences, 313
 truth and voice, 312
- Tertiary education, 42–44
- Theories of action, 245, 341, 342, 348–350, 353, 354, 356, 357
 advantages, 351
 analysis, 346
 collaborative evaluation and revision, 342
 components, 345–346
 conflicts, 346
 constraints, 346
 disadvantages, 351–352
 evaluation, 345
 formulation, 346
 incentives and interventions, 345
 informative vs. educative action, 346–347
 inquiry, 346
 in-use and espoused theories, 345
 investigation, 346
 knowledge, 345
 PBM, 345, 357. *See also* Problem-based methodology
 types, 345
 valuable empirical and theoretical resources, 341–342
 “Theorizing back”, 453–454
- Theory appraisal, 49, 353, 355
- Time, 16, 42, 68, 75, 89, 147, 268, 294, 303, 305, 377–380, 447–448
 research quality, 388–389
 youth studies, 304
- TLRP. *See* Teaching and Learning Research Programme (TLRP)
- Traditions of education research. *See* Educational research
- Traditions of inquiry, 13, 123
 cultural assumptions, 29
 dichotomy, 27
 positivism, 27
 practical inquiry, 28, 29
 “quantitative”, “qualitative” and “critical realist” research, 27
 social norms, 29
 trichotomy, 27, 28
 truth and knowledge, 28
 “war of ideologies”, 28
- Transcendental pragmatism, 14, 17, 18, 118, 379
 educational research, 22
 norms, values, and ideals, 23
 randomized field experimentation, 22–23
 “Transformation of existence”, 59, 64, 84
- Truth, 8, 14, 19–22, 42, 61–64, 74, 75, 87–94, 97, 146, 147, 150–151, 170, 311, 312, 315, 342, 377, 380–383, 430, 473, 481, 540
 belief and knowledge, 55
 characteristic features, modern philosophy, 52
 commitment to truth, 58
 discourse-based educational research, 57
The Education Science Question: A Symposium, 52
 evidence, 53
 “House of the Feeble-Minded”, 51
 human involvement, 54, 58
 knowledge and self-transformation
 configurations of inquiry, 85
 cultural requirement, 85
 enlightenment, 86
 tradition, 85
 university, 86
 learning disabilities, 57
 “mere beliefs”, 56
 phronetic research, 57
 quest for truth, 53
 Romantic research, 56
 society’s expectations, 58
 “transformation of existence”, 59, 64, 84
 “What Works” movement, 52, 53. *See also* “What Works”
 and WWC
 Wittgensteinian agreement, 54–55
- Truthfulness, 473
- U**
- Unit of analysis, 337, 338
- Universalism, 185, 240, 500
 concrete and abstract particularity, 252–254
 “universal human history”, 239
- Universities, 42–44, 444, 459, 473–474, 565, 584
 academics, 584
 context, 583
- University Ethics Committees, 457
- V**
- Validity, 71, 85, 88, 91, 164, 170, 205, 343, 348, 368, 381, 382, 426, 429, 451–452, 562
 catalytic, 452
 external, 175
 IES priority, educational interventions effect estimation, 174
 and meaningfulness, 452
 research quality, 388, 389
 threats, 174, 175
- Values, 22, 23, 135, 342–344, 346–351, 367, 372, 481, 491, 495
 neo-pragmatism, 179, 182–183
- Visual representations, 484
 evidence, 513
 graphs and tables, 513
 non-numerical evidence, 515–516
 photographs, 514–515
- Voice, 28, 84, 304–305, 312, 444, 484, 487, 501, 522, 543, 544
 public spaces, 494
 representation, 494
 struggle, 494
 Vygotsky, L., 108, 111, 112

W

- Web 2.0, 316, 319, 485
 applications, 560
 educational research, 561
 environments, 560–561
 problem-solvers, 560
 social space, 561
 social world, 561
 technologies, 562
- “What makes sense for us”, 9
 educational researchers, 72
 bias, 73
 language, 73
 narrative analysis, 72
 paradigmatic analysis, 72
 reality, 73–74
- “What Works”, 52–54, 56–58, 73, 197, 342, 359, 392, 398–399,
 402, 403, 486, 492, 494, 578
- What Works Clearinghouse (WWC), 68, 578–580
- Williams, R., 223, 298, 320, 321
- Willinsky, J., xxvii, xxviii, 392, 486, 561, 570, 576–581, 583–585,
 588–590
- Winch, P., 9, 29, 70, 73, 74, 76
- Wittgenstein, L., 9, 53–55, 58, 59, 62, 63, 70, 73, 75, 77, 126, 189,
 241, 242, 245, 263, 368, 377, 379, 578
 agreement, 54–55, 377
 epistemology and education, 79
 “language game”, 79
 political aspects, 80
- WWC. *See* What Works Clearinghouse (WWC)

Y

- Young, M., 47, 48, 267, 269
- Youth, 99, 128, 245, 253, 301–308, 312–313, 453, 561
 accountability and responsibility, 315–316
 Critical Race Theory (CRT), 253, 316
 identity and personal struggles, 313, 315
 implications, educational work, 316
 political systems, 315, 452
 research, 313, 315, 559, 562
 social justice, 316, 451
 solidarity, 316
 temporality and identity (*see* Temporality and identity)
 YPAR, 316
- Youth participatory action research (YPAR), 316
- Youth studies, 311–313
 activities, 302
 culture, 303
 educational research, 301
 ethnographic data, 303
 identity and culture, 303
 insider/outsider, 307–308
 meaning, 301
 narrative and memory, 304–305
 participatory action research (PAR) process, 303
 production, 308
 social sciences, 302
 styles and artifacts, 302
 time, space and social, 304
 visible and material, 305–307
- YPAR. *See* Youth participatory action research (YPAR)