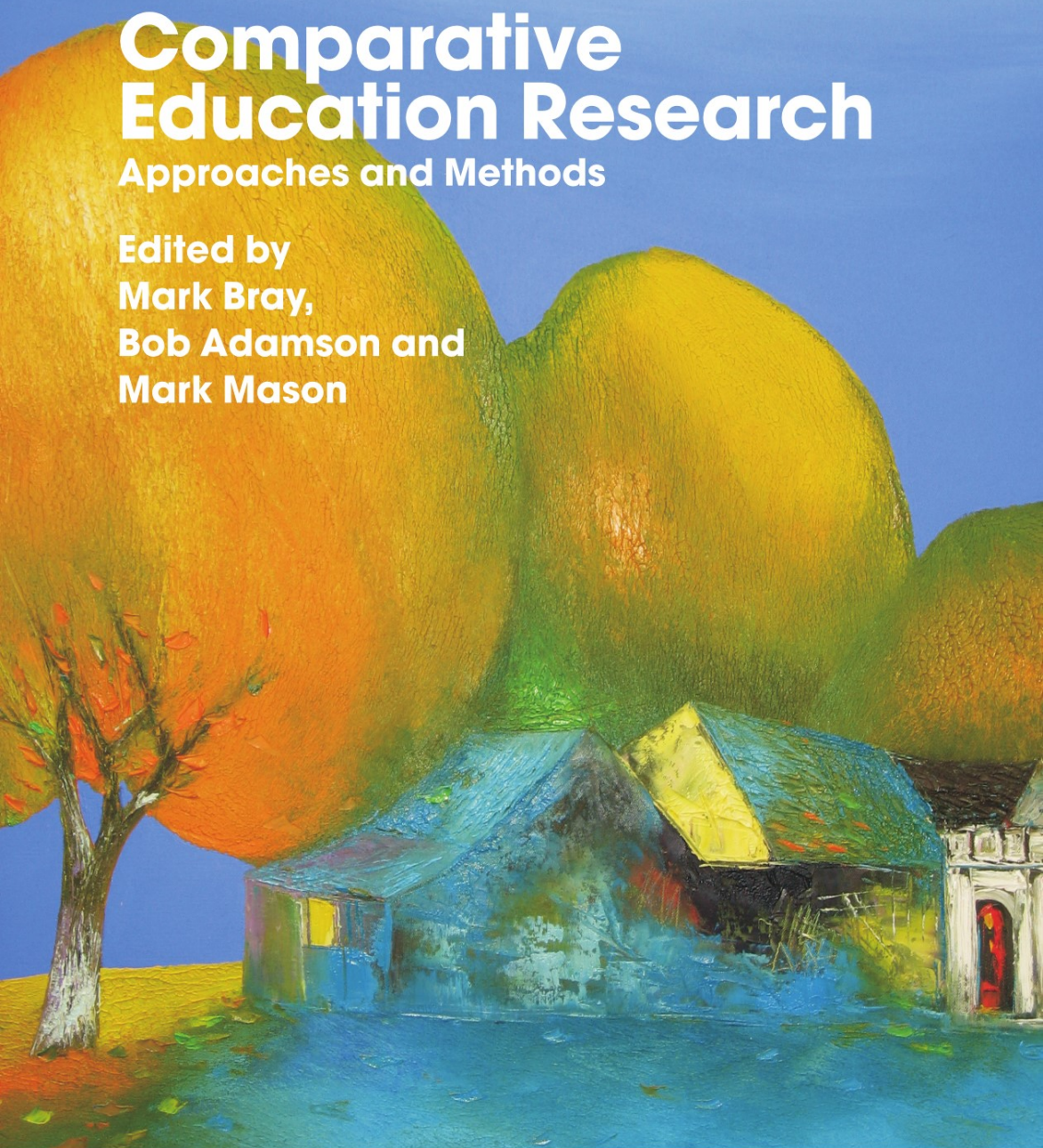


CERC Studies in Comparative Education 19

Comparative Education Research

Approaches and Methods

Edited by
Mark Bray,
Bob Adamson and
Mark Mason



Comparative Education Research Centre
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Bob Adamson
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COVER

Detail, "Autumn School", from an impressionist landscape by Vietnamese artist, Dao Hai Phong, reproduced with the kind permission of the painting's owners, Richard and Louisa Barton.

Dao Hai Phong was born in Hanoi in 1965 and graduated from the Hanoi College of Fine Art in 1987. Village scenes and depictions of Hanoi streets executed in very bright colours such as blue, yellow, green or red are characteristic of his paintings. Phong's work has been exhibited in Hanoi, Hong Kong, Italy, Laos, Singapore, Switzerland, the UK and the USA.

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Abbreviations

ANZCIES	Australian and New Zealand Comparative and International Education Society
APEC	Asia-Pacific Economic Cooperation
ASI	Approaches to Studying Inventory
BAICE	British Association for Comparative and International Education
CEPES	European Centre for Higher Education
CES	Comparative Education Society
CIES	Comparative and International Education Society
CIESC	Comparative and International Education Society of Canada
DFID	Department for International Development
EU	European Union
GDP	Gross Domestic Product
GNP	Gross National Product
GSP	Gross State Product
IAEP	International Assessment of Educational Progress
IBE	International Bureau of Education
ICT	Information and Communication Technology
IEA	International Association for the Evaluation of Educational Achievement
IESALC	International Institute for Higher Education in Latin America and the Caribbean
IICBA	International Institute for Capacity-Building in Africa
IIEP	International Institute for Educational Planning
IITE	Institute for Information Technologies in Education
LPQ	Learning Process Questionnaire
MENA	Middle East and North Africa
NAEP	National Assessment of Educational Progress
NAFTA	North American Free Trade Agreement
NGO	Non-Governmental Organisation
NRC	National Research Coordinator

OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
QUEST	Quality in Educational Systems Trans-nationally
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SAR	Special Administrative Region
SISS	Second International Science Study
SITES	Second International Technology in Education Study
SPQ	Study Process Questionnaire
TBL	Task-based Learning
TIMSS	Third [also Trends in] International Mathematics and Science Study
TRC	Teachers' Resource Centre
UIE	UNESCO Institute for Education
UIL	UNESCO Institute for Lifelong Learning
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UNESCO	United Nations Educational, Cultural and Scientific Organization
UNEVOC	UNESCO International Centre for Technical and Vocational Education and Training
UNICEF	United Nations Children's Fund
US	United States
USA	United States of America
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
WCCES	World Council of Comparative Education Societies

Foreword

This is an important new book, and a welcome contribution to the world of education research. A work of this kind is long overdue. It systematises the field of comparative education, probing what it means, why it is important, and how it is possible rigorously to compare education systems and structures, places, eras, cultures, organisations, curricula, pedagogies, achievements and values. It does this by means of reviews of literature and trends in the field, by probing research purposes and methodologies, and by analysing the nature of the field itself. Studying this book will improve researchers' comparative education skills, broaden their horizons and help them to understand and articulate more clearly where they are located within an academic "tribe" and in relation to other fields of research.

The work in this book resonates with my own experience since, like its editors and some of its writers, I have had the deeply rewarding experience of studying aspects of China's history and culture as an overseas scholar at the University of Hong Kong. The excellent research that this university continues to produce is exemplified in this book, a product of its innovative and dynamic Comparative Education Research Centre (CERC) which has spanned colonial and decolonising times. The editors point out that the book is influenced by its origins in CERC, and that it is a stage in the ongoing development of a field which has many more dimensions to be explored and developed. This book emanates from the world of British and Chinese comparative education scholarship, and is to some extent shaped by world views and experiences that come from this unique confluence. Its stimulating insights suggest what could continue to be done by pushing the boundaries of the field in other academic settings. I would like to see scholars from other regions follow the inspiring example of this book and produce additional volumes that will explore different ways of thinking, knowing, experiencing and analysing in comparative education research. Within the framework of this creative field there is room for a wide variety of approaches. This union of diversity and intellectual boundaries can surely help us to

collaborate in tackling the daunting problems of combining social justice with excellence in education in a globalising world.

The book is highly relevant to a world faced with the contradictions, problems and complexities of the current globalising economy. It is a world in which the wealthy have the resources and surpluses to help the billions of impoverished people feed, clothe, house and educate themselves more adequately, but in which the gap between rich and poor has become wider, the conditions of the impoverished more desperate, and the life-worlds of the planet more devastated. The United Nations Development Programme in its annual *Human Development Reports* has described conditions that are a stinging indictment of the negative impact of global economic injustices on the well-being of many of the world's peoples. It may well be, as some researchers point out, that the last third of the 20th century will go down in history as a period of global impoverishment marked by the collapse of productive systems in the less developed world, the demise of national institutions, and the dis-integration of health and educational programmes. This occurred in spite of the large post-World War II expansion of education. In such a context, comparative educators and their research can make a difference. They are well placed to explore why some approaches to providing education have not met goals of equity or quality, and why others do meet these goals. This book, with its clear and thorough frameworks of analysis, and emphasis on the importance of taking context into account, will help comparative educators carry out their tasks.

Because of my cross-cultural background as a Caribbean scholar who has studied and worked in several countries, I have "lived" comparative education, participating in both the advantaged education systems of wealthy countries and the struggling ones of the less developed world. From my current standpoint in Australia it is clear to me how wealth confers the privilege of being able to choose to pour massive resources for innovation and improvement into aspects of education. It is also clear how much more the wealthy could do to help poorer countries and groups improve their education systems. Yet it is not at all certain that, should they offer to increase their help, they would do this appropriately or adequately. Much foreign aid entrenches an unsuitable Western industrial model of education which can both reinforce and exacerbate socio-economic problems. Were this book to be used creatively, planners and researchers of decolonising countries should be able to develop a more systematic and informed comparative approach

to considering the suitability of options and approaches in educational restructuring. Scholars, students and planners who collaborate in systematic reviews of education systems could increase their ability to achieve educational change that negotiates and helps to shape the powerful currents of the new global age.

Anne Hickling-Hudson

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Introduction

Mark BRAY, Bob ADAMSON & Mark MASON

Approaches and methods have naturally been a major concern in the field of comparative education since its emergence as a distinct domain of studies. Different decades have witnessed different emphases, and the 21st century has brought to the field new perspectives, tools and forums for scholarly exchange. The new perspectives include those arising from the forces of globalisation and the changing role of the state. The new tools include ever-advancing information and transportation technology; and the new forums for scholarly exchange include the internet and electronic journals.

Setting the scene for this book, this Introduction begins with historical perspectives. It highlights some classic works in the field, and notes dimensions of evolution over time. Although many different categories of people may undertake comparative studies of education, these remarks focus mainly on the work of academics, since that is the main focus of this book. The Introduction then turns to patterns in the new century, observing emerging dynamics and emphases. Finally, it focuses on the contents of this book, charting some of its features and contributions.

Some Historical Perspectives

At the beginning of his classic book, *Comparative Method in Education*, Bereday (1964, p. 7) asserted that from the point of view of method, comparative education was entering the third phase of its history. The first phase, he suggested, spanned the 19th century, “was inaugurated by the first scientifically minded comparative educator, Marc-Antoine Jullien de Paris in 1817”, and might be called the period of borrowing. Bereday characterised its emphasis as cataloguing descriptive data, following

which comparison of the data was undertaken in order to make available the best practices of one country with the intention of copying them elsewhere.

Bereday's second phase, which occupied the first half of the 20th century, "interposed a preparatory process before permitting any transplantation". Its founder, Sir Michael Sadler in the UK, stressed that education systems are intricately connected with the societies that support them (see especially Sadler 1900). Sadler's successors, among whom Bereday identified Friedrich Schneider and Franz Hilker in Germany, Isaac Kandel and Robert Ulich in the USA, Nicholas Hans and Joseph Lauwerys in the UK, and Pedro Rosselló in Switzerland, all paid much attention to the social causes behind educational phenomena. Bereday named this second phase the period of prediction.

Bereday's third phase was labelled the period of analysis, with emphasis on "the evolving of theory and methods, [and] the clear formulation of steps of comparative procedures and devices to aid this enlargement of vision". The new historical period, Bereday added, was a continuation of the tradition of the period of prediction, but it postulated that "before prediction and eventual borrowing is attempted there must be a systematization of the field in order to expose the whole panorama of national practices of education" (1964, p. 9). Bereday's book itself greatly contributed to this analytical approach. The book remains core reading in many courses on comparative education, and still has much to offer. Indeed one contributor to this volume (Manzon, Chapter 4) commences with Bereday's four-step method of comparative analysis.

However, even at that time not all scholars agreed with the categorisation of periods that Bereday presented. Nor, if they did accept the categorisation, did they necessarily agree that the phases were sequential in which the period of prediction had followed and displaced the period of borrowing, and in turn the period of analysis had followed and displaced the period of prediction.

Similar remarks may be made about the set of five stages in the development of the field presented in 1969 in another classic work entitled *Toward a Science of Comparative Education* (Noah & Eckstein 1969, pp. 3–7). The first stage was travellers' tales, in which amateurs presented information on foreign ways of raising children as part of broader descriptions of institutions and practices abroad. The second stage, which became prominent from the beginning of the 19th century, was of educational

borrowing; and was followed by the third stage of encyclopaedic work on foreign countries in the interests of international understanding. From the beginning of the 20th century, Noah and Eckstein suggested (p. 4), two more stages occurred, both concerned with seeking explanations for the wide variety of educational and social phenomena observed around the globe. The first attempted to identify the forces and factors shaping national educational systems; and the second was termed the stage of social science explanation, which “uses the empirical, quantitative methods of economics, political science, and sociology to clarify relationships between education and society”.

The characterisation was widely agreed to have been useful, but the presentation of stages as sequential, with later ones displacing earlier ones, was less widely affirmed. To be fair, Noah and Eckstein did themselves state (p. 4) that the stages were far from being discrete in time, and that “each of these types of work in comparative education has persisted down to the present and may be observed in the contemporary literature”. However, their characterisation of different historical periods had greater emphasis than this remark about the coexistence of different stages. With the benefit of a few more decades of hindsight, it is apparent that all five categories remain very evident in the literature. For some individual scholars they might provide roughly distinguishable stages in personal career development, with gradation from simplistic notions to more sophisticated analyses; but the field as a whole remains eclectic and disparate in approaches and degrees of sophistication.

Nevertheless, with this pair of books and related works in the 1960s (e.g. King 1964; Bristow & Holmes 1968), the field of comparative education embarked on a period of considerable debate about methodology. The debate was not conducted evenly in all parts of the world, and patterns in English-speaking countries were very different from ones for example in Arabic-speaking, Chinese-speaking or Russian-speaking countries (Benhamida 1990; Hofman & Malkova 1990; Djourinski 1998; Wang 1998). Yet scholarship in English-speaking countries exerted significant leadership, and thus deserves particular comment. Moreover, even in that era – a pattern which has become even more visible during the present century – English was asserting itself as a language of international discourse for scholars from multiple linguistic traditions. Thus, for example, another important work in English emerged from a 1971 meeting of international experts at the UNESCO Institute for Education in Hamburg, Germany. The meeting was convened by Tetsuya Kobayashi, a

distinguished Japanese scholar of comparative education who at that time was Director of the Institute, and brought together participants from Germany, France, Israel, Poland, Sweden and Switzerland, as well as from such English-speaking countries as Canada, the UK and the USA.

The resulting book, entitled *Relevant Methods in Comparative Education* (Edwards et al. 1973), both illustrated and contributed to the debates about methodology in comparative education, and can be considered another milestone. For example, Barber (1973, p. 57) attacked Noah and Eckstein's notion of a science of comparative education as being too positivist and controlled; Halls (1973, p. 119) described comparative educators as having an identity crisis with their multiple labels such as "inductive", "problem-solving" and "quantificatory"; and Noonan (1973, p. 199) argued for the alternative paradigm represented by the emerging work of the International Association for the Evaluation of Educational Achievement (IEA).

Similar diversity was evident in the 1977 special issue of the US journal *Comparative Education Review* on "The State of the Art" (Vol. 21, Nos. 2 and 3, 1977); and the parallel special issue of the UK journal *Comparative Education* on "Comparative Education: Its Present State and Future Prospects" (Vol. 13, No. 2, 1977). The editors of the UK journal would no doubt have agreed with the introductory statement by their US counterparts (Kazamias & Schwartz 1977, p. 151):

Uncertainties about the nature, scope, and value of comparative education were sounded in the mid-1950's when the foundations were laid for its promotion as a respected field of study. Yet at that time it was still possible to identify individuals who were recognized as authoritative spokesmen for this area and writings (texts) which defined its contours and codified its subject matter. Such was the case, for example, with I.L. Kandel and his books *Comparative Education* (1933) and *The New Era in Education* (1955), and Nicholas Hans with his *Comparative Education: A Study of Educational Factors and Traditions* (1949). Today such identifications are no longer possible. There is no internally consistent body of knowledge, no set of principles or canons or research that are generally agreed upon by people who associate themselves with the field. Instead, one finds various strands of thought, theories, trends or concerns, not necessarily related to each other.

A decade later, a follow-up collection of papers that had been published in *Comparative Education Review* since the 1977 State of the Art issue suggested that the field had broadened yet further. The editors (Altbach & Kelly 1986a, p. 1) observed that:

There is no one method of study in the field; rather, the field increasingly is characterized by a number of different research orientations. No longer are there attempts to define a single methodology of comparative education, and none of our contributors argues that one single method be developed as a canon.

For example, within the book Masemann (1986) argued for critical ethnography; Theisen et al. (1986) focused on the underachievement of cross-national studies of educational achievement; and Epstein (1986) discussed ideology in comparative education under the heading “Currents Left and Right”. The final chapter by the editors of the book (Kelly & Altbach 1986, p. 310) asserted that four kinds of challenges to established research traditions had emerged since 1977:

- Challenges to the nation-state or national characteristics as the major parameter in defining comparative study
- Questioning of input–output models and exclusive reliance on quantification in the conduct of comparative research
- Challenges to structural functionalism as the major theoretical premise undergirding scholarship
- New subjects of enquiry, such as knowledge generation and utilisation, student flows, gender and the internal workings of schools

The editors also asserted (Altbach & Kelly 1986a, p. 1) that scholars had begun to address intranational comparisons as well as transnational ones. However, the book did not provide strong evidence to support this statement. Certainly the field has moved to embrace much more intranational work, some of which is remarked upon in the pages of this book; but in general this was a feature of the 1990s and after, rather than the 1980s and before.

Perspectives for the New Century

In 2000 the UK journal *Comparative Education* published another special issue entitled “Comparative Education for the Twenty-First Century”

(Vol. 36, No. 3, 2000). It appraised the development of the field since the 1977 special issue mentioned above, and in that connection the opening paper by Crossley and Jarvis (2000, p. 261) observed that:

The significance of continuity with the past emerges as a core theme in the collective articles and many contributions echo a number of still fundamental issues raised previously in 1977. Most notably these include: the multi-disciplinary and applied strengths of the field; “the complexities of this kind of study”; the dangers of the “misapplication of findings”; the importance of theoretical analysis and methodological rigour; the (often unrealised and misunderstood) policy-oriented potential; and the enduring centrality of the concepts of cultural context and educational transfer for the field as a whole.

At the same time, Crossley and Jarvis noted that the world had changed significantly since 1977. They noted (p. 261) that most contributors to the special issue in 2000 saw the future of the field in a more optimistic but more problematic light than had been the case in 1977. This was attributed to a combination of factors, and in particular to

the exponential growth and widening of interest in international comparative research, the impact of computerised communications and information technologies, increased recognition of the cultural dimension of education, and the influence of the intensification of globalisation upon all dimensions of society and social policy world-wide.

Indeed these factors have become of increased importance, and underpin many of the chapters in this book.

The ever-advancing spread of technology has greatly improved access to materials and, despite concerns about the “digital divide”, has reduced the disadvantages faced by scholars in locations remote from libraries and other sources of data. As observed by Wilson (2003, p. 30):

The advent of web pages at international organisations and national statistical services has revolutionised how basic research is undertaken in our field. The development of Internet search engines a decade ago and meta-search engines five years ago has also transformed our research capabilities.

At the same time, technology has spread the influence of the field, making the findings and insights from comparative educators available to a much larger audience than was previously the case through electronic journals, web sites and other media. The internet does, however, bring its own baggage, including an emphasis on English that contributes to the dominance of that language (Mouhoubi 2005, p. 62).

Also of particular significance are shifts in the global centres of gravity. The main roots of the field are commonly considered to lie in Western Europe, from which they branched to the USA. Subsequently, comparative education became a significant field of enquiry in other parts of the world. In contemporary times, patterns in Asia are particularly exciting. Japan and Korea have had national comparative education societies since the 1960s, but younger bodies have emerged in mainland China, Hong Kong, Taiwan and the Philippines; and since 1995 Asia as a whole has been served by a regional society (Mochida 2004). The growth of activity in China, including Hong Kong, has been particularly notable (Bray & Gui 2001; Bray 2002). These developments are bringing new perspectives based on different scholarly traditions and social priorities.

In the millennial special issue of *Comparative Education*, Crossley and Jarvis (2000, p. 263) noted that new directions for the field included “new substantive issues, and the potential of more varied and multi-level units of analysis, including global, intranational and micro-level comparisons”. Elaborating in his sole-authored paper in the special issue of the journal, Crossley (2000, p. 328) observed that:

While it is already possible to identify concerted efforts to promote, for example, micro-level qualitative fieldwork ... and regional studies ..., the nation state remains the dominant framework in published work, and few have explicitly considered the various levels.

Crossley then highlighted a paper by Bray and Thomas (1995) which stressed the value of multilevel analysis and which, Crossley suggested, deserved further attention. At the heart of the Bray and Thomas paper was a cube which presented a set of dimensions and levels for comparison. Several chapters in this book refer explicitly to the Bray and Thomas paper, and indeed in many respects it provides a core theme within the volume. The concluding chapter reassesses the cube in the light of the contributions by the various authors in the book.

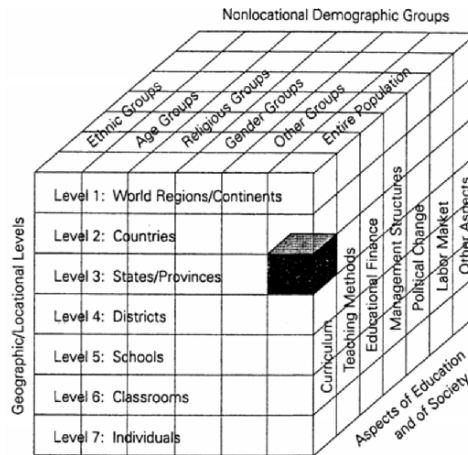
The Bray and Thomas Cube

Figure 0.1 reproduces the cube presented by Bray and Thomas (1995, p. 475). It was part of 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 have 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 intranational 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 to the benefit of all.

On the front face of the cube are seven *geographic/locational* levels for comparison: world regions/continents, countries, states/provinces, districts, schools, classrooms, 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 Figure 0.1 represents a comparative study of curricula for the entire population in two or more provinces.

An overarching point of the Bray and Thomas article was their 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.

Figure 0.1: A Framework for Comparative Education Analyses



Source: Bray & Thomas (1995), p. 475.

The Bray and Thomas framework has been extensively cited, both in literature that is explicitly associated with the field of comparative education (e.g. Ginsburg 1997; Broadfoot 1999c; Arnove 2001; Ferrer 2002) and in broader literature (e.g. Frank 1998; Ballantine 2001). It has generally been seen as useful, and some authors have endeavoured to take it further by making explicit what was already implicit in the framework. For example, 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 final chapter of this book draws on the other chapters to comment on ways in which the cube could be refined and supplemented to extend conceptualisation in the field.

The Features of this Book

Some features of this book have already been mentioned. They deserve elaboration so that readers can see the context within which the book was prepared and the contributions which it makes.

Beginning with the earlier point about shifting centres of gravity, this book is part of the increased strength of the field in East Asia. All contributors to the book are associated in some way with the Comparative Education Research Centre (CERC) at the University of Hong Kong. Its three editors have been Directors of that Centre; most of the contributors are or have been academic staff or research students associated with the Centre; and the other contributors have been visitors for various lengths of time. Because of this, the book to some extent has an East Asian orientation. However, all authors also select examples and employ materials from other parts of the world, and the book is global in its messages and relevance.

A second feature is a mix of dispassionate and of personalised chapters. Thus, some authors have sought to portray their perspectives in an objective way, while others have been subjective and even autobiographical. Both genres, it may be suggested, contribute usefully. Perhaps especially in a field such as comparative education, the backgrounds and perspectives of the analysts are of major significance. The chapters by Potts and by Watkins, for example, fit into a growing tradition in which scholars have recounted their own career histories and the ways in which personal circumstances have shaped their current thinking about the field (see e.g. Postlethwaite 1999, pp. 67–75; Jones 2002; Hayhoe 2004). The approach shows how scholarship can evolve within the careers of specific individuals, and indicates that methodological choices adopted by researchers reflect personal circumstances as well as more academic criteria. As remarked by Eisner (1996, p. ix), “We seldom reveal how we, as researchers, feel about what we are up to, or how those feelings shape our perceptions, alter our values, and enable us to construct meaning out of experience.” Such commentary can be as valuable in the field of comparative education as in other domains.

In structure, the book has three main sections. First comes a group of chapters which comment on the nature of the field. Within this group, the first identifies major purposes for undertaking research in comparative education, and remarks on the different perspectives that may be held by different actors. The second chapter in the section compares quantitative and qualitative approaches, showing the strengths and limitations of each and taking studies of literacy as a theme. The third chapter addresses the place of experience in comparative education research, and includes discussions of objectivity and subjectivity.

The second section turns to specific units for analysis. This section is the longest in the book, and forms its core. Within the field, examples may readily be found of comparative study of each of these units for analysis; but it is less common for academics firmly to consider the strengths and limitations of their approaches. The various chapters, taken separately, show multiple facets for viewing their subjects; and together they form a mosaic which represents a significant proportion of the total field. Eleven chapters focus on a wide range of units for comparison, commencing with places and ending with pedagogical innovations.

The concluding section returns to the wider picture. One chapter focuses on ways in which the field of comparative education relates to other domains of enquiry, both within the broad arena of educational studies and in other disciplinary areas. The companion chapter charts some of the continued diversity in the field and the trends and issues that have become apparent. It highlights some of the lessons to be learned from comparison of approaches and methods in comparative education research.

Preparation of this volume has been a major exercise of teamwork and coordination. Most chapters have been presented in conferences and/or CERC seminars at the University of Hong Kong. The editors and contributors hope that readers will find the book as stimulating as were the processes of preparation. At the same time, the editors and contributors view this book as just a stage in the ongoing development of the field, which indeed has many more dimensions to be explored and developed.

I: Directions

Actors and Purposes in Comparative Education

Mark BRAY

The nature of any particular comparative study of education of course depends on the purposes for which it was undertaken and on the identity of the person(s) conducting the enquiry. This first chapter begins by noting different categories of people who undertake comparative studies of education. It then focuses on three of these groups: policy makers, international agencies, and academics. Although this book is chiefly concerned with the last of these groups, it is instructive to note similarities and differences between the purposes and approaches of academics and other groups.

Different Actors, Different Purposes

Among the categories of people who undertake comparative studies of education are the following:

- *Parents* commonly compare schools and systems of education in search of the institutions which will serve their children's needs most effectively.
- *Practitioners*, including school principals and teachers, make comparisons in order to improve the operation of their institutions.
- *Policy makers* in individual countries examine education systems elsewhere in order to identify ways to achieve social, political and other objectives in their own settings.

- *International agencies* compare patterns in different countries in order to improve the advice that they give to national governments and others.
- *Academics* undertake comparisons in order to improve understanding both of the forces which shape education systems and processes in different settings, and of the impact of education systems and processes on social and other development.

When parents undertake comparisons, their concern is very practical and tied to the evolving needs of their children. When their children are about to reach or have reached kindergarten age, the parents' main focus is on kindergartens; when the children are about to reach or have reached primary school age, the parents' main focus is on primary schools; and so on. Parents may undertake systematic comparisons on carefully identified criteria; but their purposes and approaches are rather different from those of other groups on the list, and they are not the main focus of this book.

Practitioners such as school principals and teachers are in some respects similar. Their interests are less likely to progress to higher levels of the system in a linear way as the years pass (i.e. from kindergarten to primary to junior secondary, etc.); but they also have practical concerns, and their attention to particular problems is likely to diminish once those problems have been solved.

Related remarks might be made about policy makers. However, they are given more attention in this book because they are more likely to place their findings in the public domain for external scrutiny; and because of the likelihood of such scrutiny, policy makers are more likely to pay attention to methodological issues. Valuable insights may be gained from analysing both the types of comparisons that policy makers commonly undertake, and the types of conclusions that policy makers draw from their comparisons. Sometimes the comparisons are undertaken to inform future decisions, but comparisons are also commonly undertaken to justify decisions that have already been made. Around the world, different cultural and political factors become evident in the ways that policy makers make comparisons.

The comparisons made by international agencies are even more squarely within the focus of this book. Some agencies are explicitly concerned with education, and are mandated to undertake comparison as part of their reason for existence. The United Nations Educational,

Cultural and Scientific Organization (UNESCO) is an obvious example. Other important international bodies in the arena of education include the World Bank and the Organisation for Economic Co-operation and Development (OECD). These bodies each have their own emphases, but the similarities in the ways that they undertake comparisons are perhaps more obvious than the differences. Like practitioners and policy makers, international agencies undertake most of their comparisons with practical aims in mind, though international agencies may also contribute to broader conceptualisation.

Academics may also be concerned with practical aims, especially when undertaking consultancy assignments and applied research. However, perhaps the main part of academic work is concerned with conceptualisation. Many theories abound within the academic arena. Fashions change over time, and different parts of the world have different emphases. Indeed the field of comparative education itself differs in emphasis in China and Bulgaria, for example. Thus, even with its dominant focus on academic study of education, this book has multiple layers and perspectives.

Policy Makers and Comparative Education

From a practical perspective, much of the field of comparative education has been concerned with copying of educational models. Policy makers in one setting commonly seek information about models elsewhere, following which they may choose to imitate those models with or without adaptation. In some settings this practice has been described as “educational borrowing” (see e.g. Phillips & Ochs 2003; Steiner-Khamsi 2004). However, borrowing is perhaps a misnomer since it implies that the models will be given back after use, which is very rare.

When policy makers seek to identify lessons worth copying, they first have to decide where to look for the lessons. Review of patterns around the world reveals various biases in the types of places which policy makers consider worth investigating. One influence arises from language: policy makers who speak and read English are likely to commence with English-speaking countries, their counterparts who speak and read Arabic are likely to commence with Arabic-speaking countries, etc. Another influence arises from political linkages, for example within the European Union, the Association of Southeast Asian Nations or the Caribbean Community. A third influence arises from perceptions of hierarchy:

less developed countries tend to look at more developed countries, and countries that are already economically advanced tend to look at others that are similarly advanced. Policy makers in industrialised countries do not often look for ideas and models in less developed countries, though it is arguable that sometimes they should do so.

Turning to specific examples, clear evidence of importing may be found in the UK, which has at times introduced various models from the USA. According to Finegold et al. (1992, p. 7), UK reforms which were at least partially inspired by experience in the USA have included student loans for higher education, magnet schools, Training & Enterprise Councils (TECs), education-business compacts, community colleges, licensed teachers, and Employment Training.

Space constraints preclude detailed analysis of each of these, but some insights may be taken from the first, i.e. student loans. McFarland (1993, p. 51) explained that during the late 1980s the UK Secretary of Education, Kenneth Baker, made three trips to the USA to discuss student aid programmes, and made repeated references in speeches and in print to the benefits of American models. The loan schemes subsequently launched in the UK were part of a package related to the overall vision of the then-ruling Conservative government for radical reform of education (Woodhall 1989, 1995), and the momentum of the political motives caused and permitted policy makers to overlook many details first of how loans had actually worked in the USA and second how they might be expected to work in the UK. Nevertheless, the tools of comparative education were considered useful by these policy makers. The USA was considered an appropriate source for educational models not only because it was perceived to be successful in the global marketplace, but also because during that era the UK Prime Minister, Margaret Thatcher, deliberately aligned many of her policies with those of the US President, Ronald Reagan.

Many other countries have also looked to the USA as a source for models. Among them is Switzerland, in which the authorities during the mid-1990s not only explicitly referred to models in the USA but also hired American consultants to develop a reform package for schools (Steiner-Khamsi 2002, p. 76). As in the UK, the moves were strongly shaped by domestic political forces; and as the domestic political scene changed, so did the strategy for importing models. After a period of heated debate and protest by the teachers' unions, the Ministry of Education publicly distanced itself from American models. Instead, the authorities used-

references to European reforms, especially in the Netherlands and Denmark. According to Steiner-Khamsi (2002, p. 79), this new orientation suited policy makers because these European models were less known in the Swiss education community and were thus less subject to criticism and controversy. In this case, comparative education was being used not only as a source of ideas but also to legitimate the government in actions that it wished to undertake.

During the colonial era, it was standard practice for models of schooling to be imported, albeit usually with some modification, either from the colonising country itself or from other colonies of the same power (see e.g. Gifford & Weiskel 1971; Altbach & Kelly 1978; Thomas & Postlethwaite 1984). Thus, throughout the British Empire many common features in education systems reflected the political frameworks in which the colonies operated, and led to differences from school systems in the French, Portuguese, Spanish and other empires. Whereas secondary schools in UK colonies commonly led to school certificate examinations, for example, in French colonies they lead to the baccalauréat. Other differences ranged from the roles (or lack of roles) for vernacular languages as media of instruction to policies on class size and teachers' pay.

During postcolonial eras, some of the old ties have remained while new ties have developed. This is evident in Hong Kong, for example, which was a UK colony until it reverted to Chinese sovereignty in 1997. The external sources to which policy makers have turned for inspiration may be illustrated by the following four reports which were published shortly after Hong Kong's political change:

- A 1999 consultation document on the aims of education included an annex on developments in other parts of the world (Education Commission 1999, Annex 4). The other parts of the world were China, Japan, Singapore, Taiwan, the UK and the USA.
- Attached to the reform proposals in a 2000 consultation document was an appendix entitled "Reforms in Other Places" (Education Commission 2000a, Appendix I). The other places were Shanghai, Taipei, Singapore, Japan, the Republic of Korea, Chicago and the USA.
- A 2002 report on higher education contained an appendix entitled "International Examples of Institutional Governance and Management" (Sutherland 2002, Appendix D). The examples were the University of Pennsylvania (USA), the University of Wisconsin,

Madison (USA), the University of Warwick (UK), the University of Melbourne (Australia), and the Imperial College of Science, Technology and Medicine (UK).

- A 2003 document on teacher competencies by the Advisory Committee on Teacher Education and Qualifications (ACTEQ) contained an appendix focusing on Continuing Professional Development (CPD) and entitled “Teachers’ CPD Policies and Practices in Selected Regions” (ACTEQ 2003, Appendix C). The selected regions were Scotland, England and mainland China.

These lists contain an interesting mix of locations from which data were collected. The colonial legacies remained evident, with the UK (and two of its component parts – Scotland and England) still very prominent; but the lists also included many other parts of the world. Reflecting the bilingual nature of Hong Kong, in which the two official languages were English and Chinese, the majority of places on the list were either English-speaking or Chinese-speaking societies. The additional societies were advanced industrial countries in Asia – Japan and the Republic of Korea – which were considered to have some cultural affinity and were respected because of their economic successes. Also worth noting is the mix of units for comparison. In some cases comparisons were with countries (Singapore, Japan, Scotland, the USA, etc.); but also on the list were three cities (Shanghai, Taipei and Chicago) which were arguably parallel to Hong Kong in its identity as a city. The report on higher education selected a number of institutions for comparison. In this case, all were from prosperous English-speaking countries – Australia, the UK and the USA.

Instructively, while Hong Kong and its East Asian neighbours looked to such countries as the UK and the USA for models, sometimes the UK and the USA looked to East Asia for models. In England, during the mid-1990s the government’s Office for Standards in Education (OFSTED) commissioned a review of comparative studies of educational achievement. The report commenced (Reynolds & Farrell 1996, p. 3) by observing that:

We live in a world that is becoming “smaller” all the time. The spread of mass communications, and particularly of satellite broadcasting, makes ideas that were formerly found only in isolated cultural niches globally available. The enhanced interactions between citizens of different countries through visits, vacations, migrations and electronic contact are clearly both breaking down cultural barriers and

yet, at the same time, also leading to a reassertion of cultural distinctiveness.

The educational world is also becoming “smaller” all the time.... Only two decades ago, there was little reference in discussion of educational policies within the United Kingdom to “overseas” evidence, save for occasional acknowledgements of the apparent success of Scandinavian comprehensive schools from the “liberal” or “left” wings ... and of the success of German training and education-for-work provision. ... In the debate about the necessity of educational reform in the mid 1980s, in fact, comparisons were usually made with Britain’s own past, rather than with other contemporary countries.

The report made a strong case for cross-national study of education, and was taken seriously by a wide audience (Crossley & Watson 2003, pp. 2, 6; Davies 2004, p. 2). Particular emphasis in the report was placed on the high achievement scores of pupils in Pacific Rim societies, especially Japan, Hong Kong, the Republic of Korea, and Singapore. In part, the report noted, these scores reflected cultural factors which could not be replicated in the UK; but the report also noted dimensions of systems, schools and classrooms which could be shaped by policy decisions. It also highlighted, among other factors, “the complex pedagogy, lack of goal clarity and dissipation of teacher effort” which resulted in a wide variation between the levels of quality in English schools (Reynolds & Farrell 1996, p. 58).

Policy makers in the USA have also at times sought to learn from East Asia. For example, the milestone report entitled *A Nation at Risk* (National Commission on Excellence in Education 1983, p. 5) stated that international comparisons of student achievement “reveal that on 19 academic tests American students were never first or second and, in comparison with other industrialized nations, were last seven times”. It further declared (pp. 6–7) that:

The world is indeed one global village. We live among determined, well-educated, and strongly motivated competitors. We compete with them for international standing and markets, not only with products but also with the ideas of our laboratories and neighborhood workshops. America’s position in the world may once have been reasonably secure with only a few exceptionally well-trained men and women. It is no longer.

The risk is not only that the Japanese make automobiles more efficiently than America and have government subsidies for development and export. It is not just that the South Koreans recently built the world's most efficient steel mill, or that American machine tools, once the pride of the world, are being displaced by German products. It is also that these developments signify a redistribution of trained capability throughout the globe. Knowledge, learning, information, and skilled intelligence are the new raw materials of international commerce.

Building on these insights, the US Department of Education began an extensive survey of Japanese education. The final report, published in 1986, included a list of 12 principles of good education, whether Japanese or American, derived by Secretary of Education William J. Bennett (Cummings & Altbach 1997, p. 1). The list included the importance of parental involvement in their children's schooling; the necessity of clear purpose; strong motivation and high standards; the importance of maximising learning time and making effective use thereof; the centrality of holding high expectations for all children; and a firm commitment to developing a strong work ethic and good study habits.

It must be admitted that cross-national comparison did not reach the top of the agenda in the debates that followed, and the appraisal of the impact of *A Nation at Risk* presented by Gordon (2003) two decades later is striking for its lack of cross-national references and benchmarking. Nevertheless, cross-national surveys of student achievement, and in particular the Third International Mathematics and Science Study (TIMSS), of which the data were released in 1996 and 1999, had a considerable influence on policy makers. In the domain of mathematics, for example, Dossey and Lindquist (2002) reported that TIMSS data were an important reference for curriculum reform. A strong case for comparative studies has also been made by the National Research Council, which in 2003 published a report entitled *Understanding Others, Educating Ourselves: Getting More from International Comparative Studies in Education* (Chabbot & Elliot 2003).

While the above paragraphs stress cross-national comparisons, policy makers of course also learn much from intranational comparisons. This may be especially obvious in federal systems in which major differences exist between states or provinces in the structure and content of education. In Canada, for example, a 1992 report commissioned by the Economic Council made explicit comparisons both across countries and

across provinces (Newton 1992). The report noted wide variations in available resources for education in different provinces, and recommended measures to promote greater coherence in systems of education across the country. In very different circumstances, India's National Institute of Educational Planning and Administration (NIEPA) has undertaken regular comparative analyses of education in the country's different states (see e.g. Malhotra 1996; Rao 2002). These reports have counterparts in most other countries, including ones with unitary rather than federal systems.

Finally, in contrast to comparisons across space are of course comparisons over time. The tendency for British policy makers in the 1980s to make comparisons with Britain's own past rather than with other contemporary countries was noted above. The Canadian Report mentioned above (Newton 1992, pp. 22–23) also made explicit comparisons across time; and these examples have a multitude of parallels elsewhere. Policy makers are particularly inclined to make comparisons with the work of their predecessors, usually with the goal of showing how much society has benefited or will benefit from the policies that the contemporary policy makers have devised; but sometimes policy makers also learn lessons from history on obstacles to avoid and on the dangers of overambition.

Academics are sometimes dismissive of much of the comparative work of policy makers. They may argue that the work of policy makers is excessively governed by ideology, and that it is weak in design, execution and interpretation. Policy makers may be equally dissatisfied with the work of academics, especially when it fails to lead to clear recommendations that are delivered in a timely manner. However, both groups can learn from each other; and international agencies may be a third group with approaches that are again different and also instructive.

International Agencies and Comparative Education

Because of space constraints, it is necessary to select just a few examples from the huge number of international agencies concerned with education. The three bodies that have been selected are UNESCO, the World Bank and the OECD. Each of these bodies has internal variations, and patterns have evolved over time. Such variations and changes cannot be examined in detail here, but are addressed by such authors as Jones (1992), Mundy (1999), and Henry et al. (2001). In addition to these three bodies, others could also have been chosen; but this group of three

organisations is adequate to make the main points about the goals and approaches to comparative education that are typically undertaken by international agencies.

UNESCO

The United Nations Educational, Scientific and Cultural Organization was founded in 1945 in the context of reconstruction following World War II. The authors of its constitution referred to the need to advance mutual knowledge and understanding of peoples, and commenced with the declaration that “since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed” (UNESCO 1945). The constitution added that the purpose of the body was:

To contribute to peace and security by promoting collaboration among the nations through education, science and culture in order to further universal respect for justice, for the rule of law, and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religion, by the Charter of the United Nations.

Six decades later, UNESCO remained strongly committed to this goal (see e.g. UNESCO 2003a), though conflict around the world clearly remained a major problem.

UNESCO's headquarters are in Paris, France, in addition to which the organisation has a global network of National Offices, Cluster Officer, Regional Bureaus and Liaison Offices. It also has a number of specialist Institutes and Centres, among which those having functions specifically concerned with education are:

- The European Centre for Higher Education (CEPES), in Bucharest, Romania
- The International Institute for Capacity-Building in Africa (IICBA), in Addis Ababa, Ethiopia
- The UNESCO Institute for Lifelong Learning (UIL) [which until July 2006 was called the UNESCO Institute for Education (UIE)], in Hamburg, Germany
- The International Institute for Educational Planning (IIEP), in Paris, France and Buenos Aires, Argentina
- The International Institute for Higher Education in Latin America and the Caribbean (IESALC), in Caracas, Venezuela

- The International Bureau of Education (IBE), in Geneva, Switzerland
- The Institute for Information Technologies in Education (IITE), in Moscow, Russia
- The UNESCO International Centre for Technical and Vocational Education and Training (UNEVOC), in Bonn, Germany
- The UNESCO Institute for Statistics (UIS), in Montreal, Canada

In the field of education, the three strategic objectives for the period 2002–2007 were promoting education as a fundamental right in accordance with the Universal Declaration of Human Rights; improving the quality of education through the diversification of contents and methods and the promotion of universally shared values; and promoting experimentation, innovation and the diffusion and sharing of information and best practices as well as policy dialogue in education. Particular emphasis was given to the United Nations Millennium Development Goals, announced in 2000, which included achievement of universal primary education by 2015. In this framework, comparative study of education was chiefly needed in order to identify practical ways to extend the quantity, improve the quality and appropriately orient the direction of education around the world. Thus, to some extent the comparative work of UNESCO resembled that of policy makers, commented on above. Indeed UNESCO has a strong policy advisory role, particularly for national governments. As explained on its web site (UNESCO 2005):

Taking into account the diversity of national contexts, UNESCO's support primarily depends on the need expressed by countries themselves. According to the contexts, it can be a question of delivering technical assistance for the design of an education development plan, or for the preparation of a programme/project for rehabilitation and rebuilding of an education system in the case of a country in emergency or crisis. In certain cases, the support can specifically relate to the reinforcement of national capacities in the area of policy formulation, educational planning, or in the management of technical, human and financial resources.

This emphasis on countries reflected the fact that UNESCO is a member of the United Nations in which the nation (country) is by definition the basic building block. UNESCO's membership includes both industrialised and less developed countries, but its main work is focused on the latter.

In addition to statements such as that quoted in the previous paragraph, the emphasis on countries as the unit of analysis for UNESCO's work may be seen in its statistical yearbooks. Table 1.1 illustrates this observation by reproducing part of a table of statistics on primary education. Each country was allocated one line, and in this sense appeared to be equal in status even though the countries displayed vast differences in population and other indicators. Thus China, which had a population of 1,300,000, was allocated the same amount of space as Maldives, which had a population of 200,000. The table and other parts of the report did note gender differences within countries, but had no indicators of regional, racial, socio-economic or other differences within countries. Countries are commonly treated as equal units in official meetings convened by UNESCO.

Table 1.1: Statistics on Primary Education, Selected Asian Countries

Country	Net enrolment rate (%)			Teachers		Pupil/ Teacher ratio
	Total	Male	Female	Number	% Female	
Armenia	85	85	84	7,640	99	19
Bahrain	91	91	91	4,953	76	16
Bangladesh	87	86	86	320,694	36	55
Brunei Darussalam	–	–	–	3,224	70	14
Cambodia	86	89	83	48,476	39	56
China†	93	92	93	6,430,774	53	20
Cyprus†	95	95	95	3,701	75	17
India†	83	91	76	2,835,044	36	40
Indonesia*	92	93	92	1,383,914	52	21
Japan*	100	100	100	365,540	–	20
Kuwait	85	85	85	10,940	79	14
Malaysia*	95	95	95	154,233	67	20
Maldives	96	96	96	3,155	61	23
Mongolia	87	85	88	7,591	93	32
Myanmar	82	82	82	146,747	77	33
Nepal†	70	75	66	96,659	25	40
Philippines*	93	92	94	362,431	87	35
Republic of Korea*	100	100	100	128,018	72	32
Tajikistan	98	100	95	31,423	60	22
Vietnam	94	–	–	354,624	78	26

Note: Unless otherwise indicated, data are for 2001/02.

* provisional; † 2000/01; – no data available

Source: UNESCO (2004), pp. 64, 66.

However, UNESCO is of course aware of other units for analysis. Thus, although the report from which Table 1.1 was extracted contained

no analyses at sub-national level, it did present some supranational analyses. Table 1.2 is an example, showing by world region the estimated number of years that a child entering school in 2001 could expect to remain in primary and secondary education. Nevertheless, even this table was in effect based on countries as the unit of analysis, as becomes evident from the columns which indicate the number of countries in each group for which data were available.

Table 1.2: Average School Life Expectancies (Primary–Secondary Education), by World Region (Years)

	Average school life Expectancy (years)	Coverage	
		Countries	Population (%)
Africa	7.6	49/53	89.4
North America	11.2	27/31	95.4
South America	12.1	12/12	100.0
Asia	8.9	47/50	99.2
Europe	12.4	37/44	99.4
Oceania	12.4	9/17	95.0
World	9.3	179/207	93.6

Note: Data are for 2001.

Source: UNESCO (2004), p. 10.

While much of UNESCO's work is practical, aiming to expand the quantity and improve the quality of education in its member states, the organisation does also play a conceptual role. This is evident in the analytical publications produced not only by the headquarters (e.g. UNESCO 2004) but also by its Institutes and Centres (e.g. Pelgrum & Law 2003; Bertrand 2004).

In addition, UNESCO contributes to the academic field of comparative education by hosting two important journals. One is the *International Review of Education*, edited at the what is now called the UNESCO Institute of Lifelong Learning, in Germany. This journal has International rather than Comparative in its title, but is widely seen as a core journal in the field of comparative education – and indeed in 2002 was described by its editor as “the longest-running international journal on comparative education” (McIntosh 2002, p. 1). It was established in 1931, but went through various periods of turbulence before being “reborn” under the aegis of the UNESCO Institute of Education in 1955. Most articles are in English; but

the journal also publishes articles in French and German, and abstracts of each article are published in English, German, French, Spanish and Russian.

The second journal fits even more strongly within the field of comparative education. It is entitled *Prospects: Quarterly Review of Comparative Education*, and is edited at UNESCO's International Bureau of Education in Switzerland. When the journal was established in 1969, it was edited at the UNESCO headquarters in France, and entitled *Prospects in Education: A Quarterly Bulletin*. In 1972 it was renamed *Prospects: Quarterly Review of Education*, and the word *Comparative* was added to the title in 1995. In contrast to the *International Review of Education*, which can have articles in up to three languages within a single issue of the journal, *Prospects* is translated into several languages in its entirety. When the journal was launched, it appeared in English and French; and then in due course other languages were added. The editorial office moved to the International Bureau of Education in 1993, and at that time the journal was appearing in six languages: English, French, Spanish, Arabic, Chinese and Russian.

The World Bank

Early in World War II, financial experts recognised that the post-war world would greatly need international cooperative arrangements to address monetary and financial problems. After several preliminary meetings, representatives of the 44 Allied Nations met in Bretton Woods in the USA in 1944, and established the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD). Today, the IBRD is better known as the World Bank. The longer name reflected the institution's original purpose: to lend money to help reconstruct the war-torn countries of Europe. After this reconstruction had been achieved, the Bank turned to the less developed countries of the Third World. This change of emphasis explains why the full name is no longer so commonly used. The year after the Bretton Woods meeting, 1945, world leaders formed the United Nations (UN). In 1947 the Bank joined the UN family, and thus is strictly speaking a UN body. However, it operates under a different structure of governance from UNESCO and most other UN bodies.

The World Bank is multisectoral in focus, with projects ranging from agriculture to water supply. The initial decades did not include projects on education, but after the early 1960s the sector gained increasing prominence (Heyneman 2003). In 2005, the World Bank claimed that it

was the world's largest external funder of education, adding that the Bank had committed US\$33 billion in loans and credits to education, and that it currently funded 157 projects in 87 countries (World Bank 2005). During the 2004 fiscal year, half of the World Bank's 21 new projects supported primary education. The South Asia region accounted for the largest share of total education lending – US\$832 million or 40 per cent of the total. The second highest share, 22 per cent, went to Africa, “home to the largest number of countries not on track to meet the 2015 goal of universal primary completion” (World Bank 2005).

The World Bank headquarters are in Washington DC, USA, and English is the dominant working language. However, multiple languages are used for specific projects, and in 2006 the web site (www.worldbank.org) offered some information in 18 languages: Arabic, Chinese, German, English, Spanish, Persian, French, Hindi, Japanese, Kannada, Portuguese, Romanian, Russian, Swahili, Telugu, Turkish, Urdu and Vietnamese. The World Bank has multiple country offices, and employs over 9,000 people worldwide.

Like UNESCO, the World Bank is primarily concerned with the practical application of comparative education, and again much of its analysis has a country focus. Nevertheless, the World Bank does present many analytical studies of education, both in its policy documents (e.g. World Bank 1995, 1999) and in studies of particular themes (e.g. Psacharopoulos & Patrinos 2002; World Bank 2002; Peters 2004). In line with its mandate, and like UNESCO, the vast majority of these studies focus on less developed countries. The countries of Eastern and Central Europe have also gained increasing prominence since becoming a focus of World Bank work in the 1990s.

The World Bank does not operate any specialist journals in education, though it does publish articles on education in *The World Bank Research Observer* and *The World Bank Economic Review* (e.g. Gauri & Vawda 2004; Rosati & Rossi 2003; Klasen 2002). Since the World Bank is a bank, the emphasis in much of its comparative education research is on matters related to economics and financing rather than to such themes as pedagogy and curriculum. Again, the country is the dominant unit of analysis.

One membership survey of US-based Comparative and International Education Society (CIES), which is the largest society of its type in the field, asked respondents to list what they considered to be the most influential governmental and non-governmental organisations impacting on the field of comparative education (Cook et al. 2004, pp. 140–141). Out

of the 188 different organisations listed by the sample, the World Bank was identified as having the most influence and received 19.7 per cent of responses. The other organisations in the top five were UNESCO (15.8%), the United States Agency for International Development (USAID) (7.8%), the United Nations Children's Fund (UNICEF) (5.0%), the United Nations (3.7%) and the OECD (3.5%). The fact that the 69.3 per cent of the 419 respondents were resident in the USA must be taken account, since it implied a bias towards institutions that were prominent in that country and which produced a lot of material in English. Nevertheless, nearly one third of the respondents were resident elsewhere in the world, so the sample was not wholly restricted to US perceptions.

The OECD

The Organisation for Economic Co-operation and Development is younger than UNESCO and the World Bank, having been created in 1961, but owes its origins to the same period of history. It is the successor to the Organisation for European Economic Co-operation (OEEC), which was set up in 1947 with support from the USA and Canada to help rebuild European economies after World War II. The OECD has been described as a "rich man's club" of wealthy nations (Henry et al. 2001, p. 7). The OECD has itself to some extent accepted such a description (OECD 2005), though added that:

The OECD is a group of like-minded countries. Essentially *membership* is limited only by a country's commitment to a market economy and a pluralistic democracy. It is rich, in that its 30 members produce two thirds of the world's goods and services, but it is by no means exclusive. The core of original European and North American members has expanded to include Japan, Australia, New Zealand, Finland, Mexico, Korea and four former communist states in Europe: the Czech Republic, Hungary, Poland and the Slovak Republic. Non-members are invited to subscribe to OECD agreements and treaties, and the organisation now involves in its work some 70 *non-member countries* from Brazil, China and Russia to least developed countries in Africa and elsewhere. [emphasis original]

The headquarters of the OECD are in Paris, and its principal working languages are English and French.

Like the World Bank, the OECD has a multisectoral focus. The Economic Department addresses the core business, and is the largest part

of the organisation; but other sections focus on the environment, technology, food, communications and employment. The OECD's semi-autonomous bodies include the Nuclear Energy Agency, the International Energy Agency and the European Conference of Ministers of Transport.

Education also features on this list, and has gained increased prominence over the decades. The Centre for Educational Research and Innovation (CERI) was created in 1968, and established an active publications programme and strong reputation. It remains a semi-autonomous body, but has close links with the Directorate for Education which was created in 2002 as a successor to a previous sub-division within the organisation. According to an official statement (OECD 2005), the Directorate for Education "helps countries design and implement effective policies to address the many challenges faced by educational systems", and in particular "develops strategies for promoting lifelong learning in coherence with other socio-economic policies". Specific foci include ways to evaluate and improve outcomes from education, promote quality teaching, and build social cohesion through education.

Particularly well known among the OECD education publications is the annual *Education at a Glance*. The first edition was published in 1992, and subsequent editions both extended the scope and improved the reliability and comparability of data. The nature of the problems has been highlighted by Henry et al. (2001, p. 94):

Aligning data supplied by member countries has proved notoriously difficult. National data can often be incomplete, unreliable and out of phase in terms of timing and methods of data collection [F]ederal states like the US, Australia, Canada and Germany provide data in terms of weighted means, a process that cannot be assumed to have been carried out in any uniform fashion. Even aggregations are not always reliable because of changes in definitions and methodology. This is particularly so in collecting data on participation in tertiary education, where reforms in the post-secondary sector often change the ways students are classified for the purposes of allocating grants and benefits.

The OECD did, however, persist with methodological refinements. It devised techniques of aggregation and approximation to moderate the data supplied, and it used powers of persuasion to encourage its members to collect data in line with the statistical requirements of its International Education Indicators System (Henry et al. 2001, p. 95). The *OECD Handbook for*

Internationally Comparative Education Statistics (OECD 2004a) charted some of the improvements since publication of the first edition of *Education at a Glance*, and discussed salient methodological issues in data collection, presentation and analysis.

Table 1.3: Teachers' Salaries in Primary Education, in Equivalent US\$ using Converted Purchasing Power Parities

	Starting salary/minimum training	Salary after 15 years' experience/minimum training	Salary at top of scale/minimum training	Ratio of starting salary to GDP per capita	Years from starting to top salary
Australia	25,661	36,971	37,502	1.04	9
Austria	21,804	26,389	44,159	0.88	34
Belgium (Flemish)	22,901	30,801	36,594	0.93	27
Belgium (French)	22,043	29,878	35,685	0.90	27
Czech Republic	6,806	9,032	12,103	0.52	32
Denmark	28,140	32,684	32,684	1.07	8
England	19,999	33,540	33,540	0.89	9
Finland	18,110	24,799	25,615	0.79	20
France	19,761	26,599	39,271	0.88	34
Germany	29,697	36,046	38,996	1.26	28
Greece	19,327	23,619	28,027	1.29	33
Hungary	5,763	8,252	11,105	0.50	40
Iceland	19,939	21,891	25,377	0.75	18
Ireland	21,940	35,561	40,141	0.85	23
Italy	19,188	23,137	28,038	0.87	35
Korea	23,759	39,411	62,281	1.51	37
Mexico	10,465	13,294	22,345	1.19	11
The Netherlands	25,896	30,881	37,381	1.03	25
New Zealand	16,678	32,573	32,573	0.91	8
Norway	22,194	25,854	27,453	0.78	28
Portugal	18,751	27,465	50,061	1.12	26
Scotland	19,765	32,858	32,858	0.88	11
Spain	24,464	28,614	37,317	1.33	42
Sweden	18,581	24,364	—	0.81	—
Switzerland	33,209	43,627	51,813	1.20	25
Turkey	9,116	10,327	11,541	1.21	27
USA	25,707	34,705	43,094	0.76	30

Note: Data refer to annual statutory teachers' salaries in public institutions in 1999.

—no data available

Source: OECD (2001a), p. 203.

Most parts of *Education at a Glance* take the country as the unit of analysis, with the exception that some tables and bar charts show Belgium's

Flemish education system separately from its French education system. Table 1.3 reproduces one of the tables in which this separation is made. The table also shows England separately from Scotland, though shows the USA as single entity despite the diversity among its 50 states. Other tables in the same publication (OECD 2001a) showed both the UK and Belgium as single units, despite their internal diversity.

From a methodological perspective, it is instructive to note that this table, needing a common currency, uses US dollars – not in raw form according to prevailing official exchange rates, but according to purchasing powers (i.e. recognising that US\$1 may purchase more in some settings than in others). This calculation does of course rely on the accuracy of purchasing-power estimations, and still glosses over the variations that would have existed between different cities and regions within countries; but it does seem preferable to unmodified exchange rates. Secondly, the table refers only to public institutions, and to official pay scales. However, the notes in the annex to the document indicated many country-specific variations which had to be taken into account. For example, the Swiss statistics were weighted means of salaries in the different cantons; and the Belgian salaries for the Flemish community were calculated as the sum of index-linked gross salaries plus end-of-year allowances and holiday allowances. The OECD was in a good position to collect such data because it had official connections with ministries of education in each member state; but the OECD professionals realised that data could not usefully be presented for comparative analysis without considerable care in weighting and other adjustments.

While the OECD chiefly exists to serve its member states, some of its analyses have a wider focus. Thus, some issues of *Education at a Glance* have included data from other countries under the heading World Education Indicators. The 2001 edition included data on 18 such countries, explaining (OECD 2001a, p. 6) that the data were collected in coordination with UNESCO. Again, such data were mostly presented on a country-by-country basis, despite the internal diversity which might have been especially notable in such countries as China, Indonesia and Russia. Yet while the units of comparison might be challenged, the influence of the work is clear. As explained by Henry et al. (2001, pp. 95–96):

Regardless of how comparative data in fact feed policy debates in member countries, the very process of drawing in an expanding

number of countries into a single comparative field is significant in itself. Inevitably, the establishment of a single playing field sets the stage for constructing league tables, whatever the somewhat disingenuous claims to the contrary. Visually, tables or figures of comparative performance against an OECD or country mean carry normative overtones, as do more recent comparisons between OECD and non-OECD countries in the World Education Indicators programme. To be above, below or at par with the OECD average invites simplistic or politically motivated comment, despite the pages of methodological and interpretative cautions which abound in the annexes of *Education at a Glance*. This observation highlights the fact that users of comparative education data do not always approach their tasks with sufficient methodological care, whatever the care taken by the producers of such data.

Another activity in the education sector for which the OECD has become well known is the Programme for International Student Assessment (PISA), which focuses on the levels of achievement of 15-year-olds (Adams & Wu 2002; OECD 2003). For the first assessment in 2000, the survey was implemented in 43 locations (described as “countries” on the OECD web site, though one was the Hong Kong Special Administrative Region rather than a country); for the second assessment in 2003 the survey was implemented in 41 locations; and the third assessment in 2006 attracted researchers in 58 locations. Among these 58 locations, 30 were OECD countries and the remainder were not part of the OECD. According to the web site (www.pisa.oecd.org):

PISA assesses how far students near the end of compulsory education have acquired some of the knowledge and skills that are essential for full participation in society. In all cycles, the domains of reading, mathematical and scientific literacy are covered not merely in terms of mastery of the school curriculum, but in terms of important knowledge and skills needed in adult life. In the PISA 2003 cycle, an additional domain of problem solving was introduced to continue the examination of cross-curriculum competencies. ... A total of about seven hours of test items is covered, with different students taking different combinations of test items. Students answer a background questionnaire, which takes 20–30 minutes to complete, providing information about themselves and their homes.

School principals are given a 20-minute questionnaire about their schools.

In addition to country-level rankings, the PISA studies permit analysis of students' motivation to learn, beliefs about themselves and their learning strategies. The analyses also permit comparisons by gender and by socio-economic group (OECD 2004b, 2004c). As with other indicators, much work remains to be done to improve validity and comparability; but the OECD has taken this task seriously, and the growing number of non-OECD countries which have chosen to join PISA is evidence of the growing power of this enterprise.

Academics and Comparative Education

When academics undertake consultancies and other practical assignments, their purposes for comparative study of education may be similar to those of practitioners and policy makers. In addition, academics undertake conceptual and theoretical work which is presented at conferences and published in journals, in books and on web sites, and which does not aim to have immediate practical applications. Much of the present book fits into this category.

While a few people have described comparative education as a discipline (e.g. Youngman 1992, p. 19; Sutherland 1997, p. 42; Chabbot 2003, p. 116), those people were perhaps using that word somewhat loosely. Most people see comparative education as a field which welcomes scholars who are equipped with tools and perspectives from other arenas but who choose to focus on educational issues in a comparative context. Such a view has been presented for example by Lê Thành Khôi (quoted by Eliou 1997, p. 113), who stated that comparative education "is not strictly a discipline, but a field of study covering all the disciplines which serve to understand and explain education".

The questions then are how the field would be defined, where its boundaries lie, and how it is changing over time. One simple way to define the field is by the membership and work of professional societies. The US-based Comparative and International Education Society (CIES) was mentioned above. With 2,300 individual and institutional members and a history dating from 1956, it is the oldest as well as the largest in the field.

Comparable societies exist in other parts of the world, some being national in focus (e.g. serving Bulgaria, China and Poland), some being

sub-national (e.g. serving Hong Kong), some being regional (e.g. serving Europe and Asia), and two being language-based (serving speakers of French and Dutch). Most of these societies are members of the World Council of Comparative Education Societies (WCCES), which was created in 1970 as an umbrella body and which in 2006 had 33 constituent societies. Academics form the majority membership of all of these societies, though membership also includes staff of international agencies and practitioners of various kinds.

In addition, much academic work in the field of comparative education is undertaken by individuals and groups who are not members of these professional societies. Many academics identify more strongly with their parent disciplines, such as psychology, mathematics and sociology, and present their work in the conferences and journals of those disciplines rather than in the conferences and journals of comparative education. Thus, the scale of comparative study of education is much broader than that encompassed by the professional societies which explicitly label themselves as being concerned with the field. The *Comparative Education Review*, which is published by Chicago University Press in the USA, has published an annual bibliography of journal articles on comparative education. A commentary on the 2003 version (Raby 2004, p. 470) noted the growth of academic journals that were publishing articles on international, global and comparative issues. In 1997, 55 journals were included in the bibliography; the number rose to 127 journals in 2001; and in 2003 it reached a record of 346. Among those 346 journals, 224 were not from educational fields: 165 journals focused on various social sciences, and another 59 journals represented fields with emphases on area studies.

Nevertheless, much can be learned from analysis of the characteristics and inclinations of academics who do choose to identify themselves with the field of comparative education. The survey of CIES members mentioned above (Cook et al. 2004), which was undertaken in 2001, revealed a diverse and highly eclectic field which was "relatively centerless" (p. 136). However, the authors did perceive "a constituency unified around the objectives of understanding better the traditions of understanding one's own system of education by studying those of others' and assessing educational issues from a global perspective" (p. 130). Among the themes on which scholars indicated that their work focused, the most frequently named were globalisation (7.9% of all responses), gender in education (7.6%), education and development (4.6%), equality in education (4.0%), and multiculturalism, race and ethnicity (3.7%); but a huge

number of additional themes were named. Diversity was also apparent in methodological approaches and in geographic foci for study. If patterns in the CIES were to be set aside patterns in other comparative education societies, the picture would show even greater diversity (see e.g. Kobayashi 1990; Eliou 1999; Popov 2004; Zhang & Majhanovich 2004).

Most of the remainder of this book presents perspectives from academics, and in this sense elaborates on the themes which might be considered here. Chapter 15 in particular focuses on the nature of the field of comparative education and its relationship with other domains of educational studies and broader enquiry.

Conclusions

This chapter has sketched some of the diversity in actors and purposes in comparative study of education. Parents have very different purposes and therefore approaches from policy makers, and international agencies have very different purposes and approaches from academics. In addition, changes are evident over time.

Many people who undertake comparative study of education find not only that they learn more about other cultures and societies but also that they learn more about their own. This was eloquently expressed by one of the great-grandfathers of the field, Sir Michael Sadler, who wrote in 1900 (reprinted 1964, p. 310), that:

The practical value of studying, in a right spirit and with scholarly accuracy, the working of foreign systems of education is that it will result in our being better fitted to study and understand our own.

The emphasis in this quotation is of an individual looking outwards, identifying another society and then comparing patterns with those in that individual's own society. Sadler suggested (p. 312) that the comparison might encourage appreciation of domestic education systems as well as heightening awareness of shortcomings:

If we study foreign systems of education thoroughly and sympathetically – and sympathy and thoroughness are both necessary for the task – I believe that the result on our minds will be to make us prize, as we have never prized before, the good things which we have at home, and also to make us realise how many things there are

in our [own education systems] which need prompt and searching change.

Once the analyst has identified problems, the next logical step is to solutions. Isaac Kandel was a key figure in the generation which followed Sadler's. Kandel's 1933 book (p. xix) listed a set of problems which, he suggested, raised universal questions. Kandel then pointed out that:

The chief value of a comparative approach to such problems lies in an analysis of the causes which have produced them, in a comparison of the differences between the various systems and the reasons underlying them, and, finally, in a study of the solutions attempted.

The tone of such a statement is more closely allied to theoretical goals; and Kandel's book to some extent established a tradition into which the present book fits. However, the field of comparative education has evolved in very significant ways since Kandel wrote those words. Some ways in which it has evolved, and some valuable ways to promote understanding through the use of different units for comparison, will become evident in the chapters which follow.

Quantitative and Qualitative Approaches to Comparative Education

Gregory P. FAIRBROTHER

Among the many approaches to research, a broad classification distinguishes between the quantitative and the qualitative. Boundaries may be difficult to determine, and the approaches may not be mutually exclusive. Nevertheless, the two approaches deserve focus because they permit different types of insights.

The chapter begins with a description of the characteristics of the approaches and how they differ with regard to purposes, structure and theory. It also addresses questions of objectivity, values, and relationships between researcher and researched. The chapter next turns to quantitative and qualitative approaches to research on one prominent topic within the field, that of literacy. It first reviews how researchers on literacy coming from the two traditions present the advantages of their respective approaches. It then argues that among the goals of both quantitative and qualitative research on literacy is to seek answers to the same four fundamental questions while differing in their approaches to doing so. The questions are how literacy can be accurately defined and depicted; where variations in literacy lie; what leads to literacy; and what the consequences of literacy are. Both quantitative and qualitative approaches to answering these questions are compared, using specific examples from published research.

Quantitative and Qualitative Research Methods in Education

In his *Educational Research Primer*, Picciano (2004) provided a simple comparison of quantitative and qualitative research methods in education. He defined quantitative research as relying on “the collection of numerical data which are then subjected to analysis using statistical routines” (p. 51). By contrast, he suggested, qualitative research relies on “meanings, concepts, context, descriptions, and settings” (p. 32). Quantity refers to amounts, while quality refers to the essence of things.

Among quantitative types of research, Picciano mentions descriptive studies, correlational research, causal comparative research and experimental studies. Qualitative research methods include ethnography, historical research and case study research. To explain the differences between these methods, Picciano compared them along the lines of purpose, data sources, methods of data collection, data analysis, and reporting. For example, the purpose of a quantitative correlational study is to use numerical data to describe relationships between variables and to predict consequences following from these relationships, whereas the purpose of a qualitative ethnographic study is to describe and interpret a phenomenon observed in its natural setting. Different purposes are accompanied by specific sources of data. The correlational study relies on quantitative data from school databases, test scores, surveys and questionnaires, while the ethnographic study is based on observations, field notes, and even photographs and videos.

As a preface to his detailed descriptions of the various quantitative and qualitative research methods, Picciano noted (p. 32) that “a grand debate has existed for decades on the virtues of one approach over the other. Rather than enter this debate, we note that both approaches are highly respected and, when done well, add equally to the knowledge base”. However, other scholars of methodology are less dismissive of the differences between research approaches, and maintain that quantitative and qualitative research methods are distinguishable at a variety of fundamental levels. Supporters of each type have come to claim the superiority of their own methods, and commonly criticise their opponents.

Quantitative Approaches

The overarching purpose of quantitative research methods in education is the development of laws which contribute to the explanation and prediction

of educational phenomena (Bryman 1988; Smith 1983). Laws of association claim a functional dependence between objects, while laws of causation imply a fixed succession of events. The adherence of quantitative approaches to a nomothetic mode of reasoning implies that researchers consider such laws to be universal, regardless of differences in time or place. Laws accordingly make it possible to explain and predict relationships between phenomena across contexts.

Bryman (1988) noted that establishing causality is one of the primary preoccupations of quantitative research. Explanations, or questions of “why”, imply a search for causes, specifying certain causal factors and ruling out alternatives. A particularly effective method for establishing causal relationships is the experiment; but many researchers rely on correlational studies, with data gathered through surveys, to argue for causation. Bryman noted that to make such an argument, these researchers must demonstrate a relationship between variables, that the relationship is not produced by a third variable, and that the variables are in a logically temporal order.

Because of quantitative researchers’ commitment to nomothetic reasoning, their research has the further purpose of generalising findings to larger populations and other research locations. This goal is said to be achieved through the use of random, representative samples in experimental and survey research. The attempt to replicate research findings is a further step engaged in by quantitative researchers in order to strengthen the claim of generalisation. Scholars advocating comparative methods draw the purposes of generalisation and explanation together, claiming that generalisability is enhanced when greater variation is introduced to the explanatory variables of interest (Grimshaw 1973; Marsh 1967). The maximisation of variation is said to be made possible at the level of society, justifying the use of cross-national and cross-cultural research (Brislin et al. 1973; Kohn 1989; Marsh 1967). Comparative studies can thus be presented as a substitute for experimentation when actual experimental research is impractical or impossible (Arnove et al. 1982).

A further purpose of quantitative studies is deduction, theory or hypothesis testing and verification. This goal leads quantitative research to be characterised as confirmatory, and reflects the typical structure of the quantitative research process. Such a process is said to start with a general theory and move on to the statement of more specific hypotheses, the operationalisation of concepts as variables for the collection of data, and then to statistical analysis of such data.

This structured approach to research is a defining factor of quantitative traditions. Researchers using surveys and experimental methods generally need to decide on the specific issues of focus at the beginning of the research, before data collection instruments such as questionnaires are designed and data are gathered. Because of this, the broad outline of findings can often be determined from the outset. This approach means that the research focuses on and is limited to a relatively narrow range of concepts. In order to study these concepts, they must be operationalised, or transformed into “variables” which can be observed, measured, and related to one another. As (Bryman 1988, p. 22) stated, the social world thus “tends to be broken down into manageable packages: social class, racial prejudice, religiosity, leadership style, aggression, and so on”. These characteristics of the quantitative method lead it to be associated with precision, rigour, reliability and persuasiveness. “Hard” data are collected through structured, systematic procedures and are amenable to verification by others.

These claims are strengthened with the supposition in quantitative methodology that the methods and data have not been affected by the researcher. With limited, or even an absence of direct contact between the researcher and the subjects of research, the image of a detached scientific observer is maintained. The researcher takes on an outsider’s, “etic” perspective, with as little involvement with research subjects as possible, leading to the claim that quantitative research is objective and value-free. Standardised questionnaires and concerted efforts at random sampling are designed to reduce or even eliminate human bias.

Qualitative Approaches

The question of objectivity and values is one point around which the debate between quantitative and qualitative approaches revolves. The description of the qualitative research perspective on this and other questions below demonstrates the contrasts between the two perspectives in terms of the approach to and purpose of research. In the qualitative tradition, objectivity is challenged, and the process of research and the “facts” it reveals are seen to be laden with values. Rather than a position of detachment between researcher and subjects, qualitative approaches see researchers themselves as instruments of data collection, often with sustained and intimate contact and relationships with their subjects, further defying claims of a need for objectivity. Guba and Lincoln (1994, p. 107) maintain that “the notion that findings are created through the interaction

of inquirer and phenomenon (which, in the social sciences, is usually people) is often a more plausible description of the inquiry process than is the notion that findings are discovered through objective observation”.

A related point is that a fundamental purpose of qualitative research is to capture the research subject's perspective and views of values, actions, processes and events. Qualitative research presents the “emic”, insider's perspective, empathising with the subjects of research. Through methods such as detailed participant observation and in-depth unstructured interviews, subjects are given far more latitude to share their own views, with the researcher tending towards surrendering control to the researched in the process of inquiry.

In contrast to the quantitative methodology which seeks general explanatory laws, the qualitative approach denies that such laws can ever be found (Smith 1983). Qualitative researchers therefore take an ideographic rather than a nomothetic approach, locating their findings in specific time periods and places (Bryman 1988). Research conducted in a specific place does not have as its primary aim generalisation to other populations; instead the attention is focused on events, processes and behaviours in the immediate context. At the same time, rather than limited to particular variables of interest, the qualitative approach is more holistic and naturalistic, examining entire social entities such as schools or communities at many levels and along many dimensions. The goal of this approach is again an interpretive, empathetic understanding, and an attempt to capture the meanings that research subjects attribute to their own particular, yet whole, situations.

Bryman (1988) noted that qualitative researchers' attention to their informants' perspectives leads to an avoidance of imposing a preconceived structure and predetermined notions upon their subjects. Therefore studies are characterised by openness, flexibility and a lack of structure. This contrasts with the work of quantitative researchers, who tend towards deciding at the outset upon concepts which can be operationalised and measured. Qualitative researchers may or may not have specific research problems as predetermined targets of investigation. Instead, the decisions on foci may be delayed well into the research process, allowing for unexpected issues to be pursued. Qualitative research can therefore be more easily characterised as inductive and exploratory, rather than deductive and confirmatory.

The same considerations apply to the position of theory in qualitative research. Given their adherence to the insider's perspective and to an

inductive, flexible, and unstructured approach, qualitative researchers do not normally start with a theory to be tested or validated. A preconceived theory could be viewed as a constraint in the research process, and could prove to be a poor fit with the revealed perspectives of research subjects. The discovery, formulation and testing of “grounded” theoretical explanations instead are conducted simultaneously with the process of data collection and analysis.

Finally, in presenting research findings, rather than explicating statistical relationships among carefully delineated and measured concepts, qualitative researchers tend towards providing rich, deep, detailed descriptions. Such detail contributes to explaining participants’ perspectives and developing an understanding of the meanings they attach to the phenomena of interest. At the same time, qualitative researchers do go beyond pure description to analyse, interpret and offer explanations of complex situations and phenomena.

The Debate

Picciano (2004) noted that there was a grand debate between adherents to the quantitative and qualitative research traditions. Quantitative research is criticised for silencing voices, ignoring subjects’ perspectives, excluding meaning, focusing on theories which are irrelevant to research subjects themselves, stripping away context from research questions and only generating data which are superficial and inapplicable to individual cases. Detractors of qualitative research criticise it for relying too much on the researcher’s interpretations, producing findings which are not generalisable or replicable, generating “soft” data, and even being an assault on truth (Bryman 1988; Denzin and Lincoln 2000).

The differences in research purposes and approaches just described have been further characterised as “divergent assumptions about the nature and purposes of research”, and “competing views about the ways in which social reality ought to be studied” (Bryman 1988, pp. 3, 5). Smith and Heshusius (1986, p. 8) go further to maintain that quantitative and qualitative are not just two different approaches to or perspectives on research, but involve differences in basic philosophical assumptions and logics of justification. Such logics revolve around fundamental questions on the nature of social and educational reality, on the relationship of the investigator to what is investigated, and on how truth is to be defined. Guba and Lincoln (1994) characterise the two approaches as paradigms, basic belief systems with fundamental differences at the levels

of ontology, epistemology and methodology. With differences so fundamental and far-reaching, some scholars claim that the two research traditions are basically incompatible.

Other scholars disagree. Howe (2003) argued at length that the quantitative/qualitative distinction is dogma, that the idea of incompatibility of methods is just a thesis, and that there is no epistemological incoherence in integrating methods. Gorard and Taylor (2004) and Bryman (1988) also maintained that there are numerous ways in which quantitative and qualitative methods can be fruitfully combined in one study. For example, in-depth interviewing can be conducted prior to the design of a questionnaire to help formulate relevant questions. The impact of a quantitative experiment can be studied qualitatively over time. Survey questionnaires can be used to help researchers understand attitudes and the meanings that respondents attach to the phenomena of interest. Data gathered through ethnographic interviewing can be used to illuminate further the findings of a questionnaire survey. Different research approaches can share the same aim and can be seen as different ways of examining the same research problem. The choice of research method is a technical decision which depends on the needs of the investigation. Each method is appropriate to different kinds of research questions, and the task of researchers is to find an appropriate methodological fit with the questions to which they are seeking answers.

Considerations for Comparative Education

Several of the issues associated with the use of quantitative and qualitative methods identified above have special salience in comparative education research. On one hand, there is a certain pressure within the field for the use of quantitative methods. This goes along with a shift over time within the field of comparative education from historical, explanatory studies towards studies employing statistical information and quantitative data analysis procedures. Some researchers are drawn to the quest for generalisable explanations and universal principles applicable to educational phenomena across societies and cultures. Concomitantly, there is an attraction for some scholars and policy makers to the transfer of educational theories, practices, and policies across international borders, and a desire to seek global solutions to global problems. Large-scale databases from international studies of educational achievement, and education statistics gathered by international agencies, can be tempting to experienced and novice researchers alike because of their availability and

influence. Finally, research commissioned by governments or international organisations may carry a preference for particular method and theories.

From other quarters there is comparable pressure for qualitative studies, sometimes in reaction to the perceived shortcomings of quantitative methods. Qualitative researchers in comparative education share a strong belief in the importance of cultural, political and social contexts, and the position that education cannot be decontextualised from its local culture. Qualitative research is also advocated because of an awareness of the shortcomings and problems associated with large bodies of cross-national statistical data, often uncritically employed without consideration of potential bias, and with units of analysis (usually nation-states) compared without considering local contexts and internal variation. With regard to the question of the objectivity or value-ladenness of the research endeavour, qualitative researchers draw attention to the need for sensitivity to the greater potential for bias and unquestioned assumptions when researchers work outside their own cultural contexts. They maintain that effort must be made to become conscious of such biases and to question one's own assumptions while trying to understand the assumptions underlying the societies and cultures which are the targets of research.

Quantitative and Qualitative Research on Literacy

To deepen the discussion and compare quantitative and qualitative methods in comparative education, this chapter turns to a description of a range of studies on a particular theme, literacy. It demonstrates that research on this theme reflects the quantitative/qualitative debate, but that both types of research can seek answers to fundamentally similar questions. Literacy has been noted as a prominent concern of comparative education researchers, not least because of the influence on research agendas of powerful international agencies such as UNESCO and the World Bank (Crossley and Watson 2003). Studies on literacy abound in journals such as the *Comparative Education Review*, *International Review of Education* and the *International Journal of Educational Development*. They range from large-scale cross-national quantitative studies of literacy achievement to small-scale, in-depth ethnographies.

Before turning to these studies, it is useful to note what quantitative and qualitative researchers in literacy see as the advantages of their respective methods. Elley (1994, 1999) commented on several of the advantages of

large-scale, international quantitative studies of literacy achievement such as those carried out under the auspices of the International Association for the Evaluation of Educational Achievement (IEA). First, he pointed out, these studies provide a systematic body of evidence of kinds and levels of literacy achievement among national samples of students. Such a database has made possible directly comparable judgements about literacy in different nations, in contrast to a less standardised collection of national literacy rates based on a variety of indicators. From observed differences in literacy levels within and between countries, researchers can evaluate hypothesised explanations for these differences. Elley observed (1994, p. 223) that “a major rationale for conducting such studies internationally is that the influence of a greater range of variables can be studied, variables which differ substantially between countries, but very little within countries”. For policy makers and educators, cross-national studies can help identify the effects of policies that differ among countries, providing evidence of the strengths or weaknesses of their own policies. In this way, educators around the world can learn from each other and move towards better reading programmes. To these advantages, Murray (1999) adds that large-scale quantitative studies make it possible to draw conclusions about the association of literacy with economic life chances and opportunities. Finally, these scholars draw attention to the potential for further secondary research using the large data sets made available from such studies.

At the same time, Elley (1999) acknowledged several weaknesses of these studies, including potential translation problems and the difficulty of ensuring comparable samples. Challenges affecting the interpretation of results, he added, include different traditions of testing among participating countries, different structures and sequencing of school curricula, and the close relation between literacy and cultural context. Hamilton and Barton (2000) commented further on these weaknesses. They maintained that the standardised tests used in cross-national quantitative studies ignore culture and are still only weak, limited and simplistic proxy measures of literacy. They added that such measures are not valid because test items have no relation to respondents’ actual everyday literacy practices or to the role of literacy in different societies and contexts. In response to the idea of transferring policies and reading programmes cross-nationally, these scholars maintain that not only can literacy practices not be imposed by one society on another, but even that what is

known about literacy cannot necessarily be transferred across different contexts within the same society.

Qualitative researchers maintain that literacy is meaningful only within its own context of social and cultural practice, and that different domains of social life, such as education, the workplace, and religion, entail different forms of literacy (Hamilton & Barton 2000; Street 1993; Street 2001). They see ethnographic methods as more appropriate for gaining an understanding of people's local, everyday experiences of literacy within multiple settings. In-depth, detailed descriptions of literacy practices in different contexts, they maintain, are better able to reveal complexity, illuminate the power relations associated with literacy and challenge stereotypes of the "literate" and the "illiterate".

Despite these differences, and while studies of literacy vary widely as to their research methods, contexts and specific questions addressed, they also exhibit fundamental similarities in purpose. Specifically, they seek answers to at least four basic questions:

1. How can literacy be accurately defined and depicted?
2. Where do variations in literacy lie?
3. What leads to literacy?
4. What are the consequences of literacy?

Some of the studies examined below identify themselves as ethnographies or as large-scale quantitative research studies. Others have employed mixed methods. For the purpose of differentiating between quantitative and qualitative methods, simple distinctions have been made according to the nature of the data reported. For the present discussion, studies which mainly report results in the form of numbers and statistics are treated as quantitative, and policy and historical studies are grouped within the broad qualitative tradition.

How can Literacy be Accurately Defined and Depicted?

Both quantitative and qualitative studies seek answers to the fundamental question of how literacy can accurately be defined and depicted, but differ in their approach to and interpretation of the question. Quantitative studies approach this question by seeking an accurate, objective method to measure literacy. One cross-societal study, the International Adult Literacy Survey (IALS), started with a set definition of functional literacy as "the ability to understand and employ printed information in daily activities at home, at work and in the community", and directly measured

the three associated domains of prose, document and quantitative literacy (Darcovich 2000, p. 369). This survey was viewed by the researchers as an innovation because it measured varying degrees of literacy in each of the domains – measures judged more accurate than the dichotomous literate/illiterate used in numerous other studies. Jennings (2000) similarly claimed that the 97.5 per cent adult literacy rate for Guyana reported by the government to international aid agencies was inflated because it was based on the percentage of enrolment in primary schools rather than on a direct assessment of literacy. On the basis of the results of the Functional Literacy Survey of Out-of-School Youth, which defined functional literacy as “the ability of the individual to apply skills in reading, writing, calculation and basic problem-solving in those activities in which literacy is required for effective functioning in his/her own group and community”, Jennings estimated that Guyana’s actual literacy rate was more than 20 percentage points lower.

Dealing with a similar problem, Lavy and Spratt (1997) complained that national-level census-based statistics suffered from inaccuracy, incomparability, questionable assumptions, unclear definitions and misinterpretation. Solutions to these problems, they argued, were important for moving towards the improvement of policies and programmes to battle illiteracy. The Morocco Literacy Study on which they reported directly assessed individuals on a variety of literacy skills, and at the same time asked respondents to make self-judgements of their reading, writing and mathematics abilities. Based on their comparison of these two measures, the researchers found that self-reports rarely underestimated but often overestimated actual literacy skills, leading them to conclude (p. 128) that “healthy ‘literacy rates’ ... may in fact contain a high proportion of persons with very minimal literacy skills”. In one more study comparing and finding differences in objective (directly assessed) and subjective (self-reported) literacy rates from samples in Ethiopia and Nicaragua, Schaffner (2005) concluded that measures of literacy employed in household surveys overstated actual literacy rates, especially in countries with low average schooling levels, and that this finding had implications for understanding of the number of years of schooling necessary to develop literacy among most students.

Introducing his qualitative study, Maddox (2005, p. 123) wrote: “Processes of assessment have generally focused on narrowly oriented tests of ability, rather than examining how people have applied such learning in their daily lives.” This statement describes well the difference

between the quantitative and qualitative approaches in addressing the question of how literacy should be most accurately defined and depicted. While quantitative researchers have sought ways to more accurately and objectively assess and measure literacy skills, qualitative researchers have tended to look to their research subjects for insight into what literacy means to literates themselves, judging this to be the most accurate representation. As one example, in contrast to the idea of literacy as a public practice associated with national development, Maddox found in his ethnographic study of literacy among Bangladeshi women that literacy activities were often conducted surreptitiously in private, because of the perception among these women of associated risk and vulnerability. Maddox also found that women who could read fluently in Arabic did not consider reading the Quran as a form of literacy, yet that this ability could in fact raise these women's status within the community. Explaining his findings, Maddox relied not on statistics but on descriptive case studies of individual women and their literacy practices.

In her ethnographic study of native Peruvians, Aikman (2001, pp. 106–107) asked the questions: "What do the Harakmbut consider counts as literacy?", and "How, then, do the Harakmbut use literacy for specific development practices?" These questions were again asked in the context of external development discourses surrounding the Harakmbut's own perceptions of literacy and development. Among her findings was that to these people literacy in Spanish meant promoting their own self-development and access to resources for protecting and promoting indigenous rights. Literacy in their own language had several implications within the group she studied, including both a valuation of their culture and oppositely a reinforcement of their otherness and a loss of status and prestige in the wider Peruvian society.

In another attempt to reveal how literacy is experienced and interacts with power relations in everyday lives, in contrast to professional, social science, and government discourses of literacy as power, Rockhill (1993) conducted life history interviews with Spanish-speaking immigrants in California. In response to her women interviewees who expressed a desire to learn to read and write, Rockhill asked: "Is their goal to become empowered? To act in accord with their rights? To resist? If so, who, what and how do they resist?" (p. 163). Referring to academic and policy discussions of the importance of literacy for empowerment in economic, political and cultural spheres of public activity, she answered: "Conceptions of empowerment, resistance and rights do not capture the

way the women we interviewed talk about their longing for literacy, how they think about their lives, what is meaningful to them, or the conflicts they live" (pp. 164–165).

These examples illustrate the contrasts between academic, political and economic discourses and literacy as experienced by the subjects of these studies. Other qualitative researchers have drawn more explicit contrasts between the intentions of literacy educators and development practitioners on one hand, and the newly literate on the other. Explaining how new literates in Gapun, Papua New Guinea "seize hold" of those aspects of literacy for which they have the most use, Kulick and Stroud (1993) noted that the concerns of the promoters of literacy, the Church and schools, were largely peripheral to villagers themselves. They wrote (p. 55) that:

The villagers of Gapun have their own ideas about reading and writing, generated from their own cultural concerns. It has been and continues to be these ideas, and not externally generated and culturally foreign ones which they apply to the written word in the village.

Dyer and Choksi (2001) also explained that their own preconceptions of the literacy needs of Rabari nomads in India were contradicted by their subjects' insights into the meaning of literacy in their lives. Coming from a development assistance perspective, the researchers expected the Rabaris to use new literacy skills to help with carrying out their occupation, animal husbandry, and to appreciate a programme of literacy education within pastoralism revolving around their own knowledge and experience. Instead, through ethnographic work, the researchers found that literacy was perceived by the Rabaris mainly as a way to reduce their dependence on others and as associated with being sedentary and offering a better future for their children in the non-pastoral economy.

Puchner (2003) attributed the low success rate of a literacy programme in rural Mali to the fact that programme planners came from a narrow, traditional development perspective which did not value the purposes for which learners actually might use literacy skills. Through her interviews and observations, she found that while some literate women used literacy skills for tasks assigned to them by development workers, others used literacy more for engaging in commerce and for decorating houses. In one further example (UNESCO 2001) observed that stories and images about agriculture in materials designed to teach

women farmers to read often misrepresented the reality of farmers' conditions in many parts of the world (UNESCO 2001). The publication noted that "to better reflect reality, validate women's contribution to agriculture and encourage women learners to identify with the learning materials, the texts and illustrations used in literacy programmes should portray women as the farmers they most certainly are: at work in rice paddies, orchards, and plantations around the world" (p. 5). The remainder of the publication engaged in a qualitative content analysis of literacy materials, to demonstrate ways in which women's realities could be accurately portrayed.

Mpofu and Youngman (2001), engaging in a qualitative descriptive analysis of national-level literacy policies in Botswana and Zimbabwe, drew attention to the differing meanings of literacy between these paradigms. They maintained that the old meaning, which until recently had dominated international discourse, determined the nature of national literacy policies even though associated programmes proved to be relatively ineffective. They concluded by noting the difficulty of a corresponding shift in national policies along with that in international literacy discourse.

In sum, both quantitative and qualitative researchers of literacy have dealt with the fundamental question of how to define and depict literacy accurately. In the quantitative studies described above, the goal was to come up with a more objective and reliable method for measuring literacy skills, in the face of alternatively employed national-level statistics and subjective measures. The definition of literacy itself was normally assumed or defined at the outset based on theoretical literature. In contrast, the qualitative studies of individuals, also concerned with accuracy in the face of external conceptions of literacy, privileged the meanings of research subjects themselves and drew attention to the uses to which literacy was put. Policy studies sought to shed light on the meaning of literacy as employed by national and international actors which hold the power to set education agendas, whether or not their conceptions of literacy were shared by the targets of their policies. In each case, it was clear that there were differences in the measurement and understanding of literacy, between external actors and subjects, and among subjects themselves. Accordingly, a second fundamental question which both quantitative and qualitative research approaches both attempt to answer in their own ways concerns the locations in which variations in literacy lie.

Where do Variations in Literacy Lie?

Papen's (2001) ethnographic study of the National Literacy Programme in Namibia (NLPN) compared the practices and meanings of literacy in the various social and institutional contexts within the programme, such as training sessions for teachers and events associated with National Literacy Day. Based on her analysis of policy documents, evaluation reports, political speeches, and her own observations, she maintained that certain understandings of literacy were privileged over others and influenced which literacy practices were employed in the programme. Although focused on one geographic entity, Namibia, her study engaged in comparison of different contexts, eliciting variation at several levels encompassed within a broader conception of comparative education (Bray and Thomas 1995).

Other qualitative studies have examined variation in the meanings attached to literacy in different languages and by different institutions and actors. Reder and Wiklund's (1993) ethnographic study of literacy in an Alaskan fishing community in the USA, described the different social meanings attached to, and conflict and competition between, "Village" and "Outside" literacy practices. They found that these two conceptions of literacy were associated with distinct institutions, with "Village" literacy practices tied to the Orthodox Church and the fishing industry, and "Outside" practices coming from the school and government agencies. In a related vein, based on an ethnographic study of literacy among the Mende of Sierra Leone, Bledsoe and Robey (1993) described the different associations and advantages for pursuing social goals attributed to literacy in Arabic and English. They maintained that literacy in the two languages had different meanings and functions, with Arabic associated with religion, ritual, secrecy and supernatural power, and English tied to government, bureaucracy, technology and material wealth. Weinstein-Shr (1993) brought the comparison down to the level of the individual, looking at the different meanings and uses of literacy in the lives of two Hmong immigrants to the USA. Looking at the connections between literacy and kinship in the context of lifestyle changes accompanying immigration to a literate society, she found that one man's literacy activities were focused inward on his family, clan, traditions and the past. Her other informant, by contrast, used literacy to take risks, create new relationships, and gain access to new resources. Finally, Robinson-Pant (2000) compared the meanings attributed to literacy by men and women in her ethnography of literacy in a remote area

of Nepal. She found that the conceptions of literacy of educated men in Arutar corresponded with the aid agency staff who implemented literacy classes, while women learners saw literacy in a separate light, even in opposition to the dominant, agency, male perspective.

Quantitative researchers have also compared men and women with regard to literacy, but rather than examining differing meanings of literacy, they have focused on differences in literacy skills. Several studies have looked at differentials in literacy achievement and rates on the basis of gender by carrying out direct assessments and eliciting self-reports (Fuller et al. 1994; Gunawardena 1997; Jennings 2000; Lavy and Spratt 1997). Scholars have also used quantitative methods to examine differentials in literacy achievement and rates based on mother tongue (Ezzaki et al. 1999; Gunawardena 1997), type of (urban/rural) community (Fuller et al. 1999; Gunawardena 1997; Lavy and Spratt 1997), education level (Jennings 2000; Lavy and Spratt 1997) and socio-economic status (Jennings 2000; Lavy and Spratt 1997). Fuller, Edwards and Gorman (1999) also compared literacy rates among Mexican states and in different time periods. Finally, the IEA studies of reading literacy compared direct assessments of children's literacy among different nations, as well as comparing groups based on gender, parents' birthplace, parents' occupation, teachers' gender and a plethora of other factors (Elley 1994; Mullis et al. 2003).

In examining variations in literacy, the qualitative studies described above focused on the different meanings of literacy among groups of people and individuals, institutions, and associated with different languages and practices. They presented findings in the form of descriptions and direct quotations. In some cases, they maintained that differences in the meanings attached to literacy by educators and learners had implications for the outcomes of literacy programmes. Quantitative researchers have shared similar concerns in their comparisons of the literacy achievement of numerous types of groups: the implication from the finding that certain groups have lower levels of literacy achievement than others is that ways should be sought to raise their achievement. This was the explicit goal in one quantitative, experimental study which compared the achievement of adults participating in a functional literacy programme with those in a "classical" literacy programme, as well as comparing students' reading test scores before and after participation in the programme (Durgunoğlu et al. 2003). In this case, the comparison was made in order to assess the impact of literacy classes. In numerous other quantitative and qualitative studies,

researchers have shared a similar interest in assessing the impact of a variety of other factors on literacy, leading to a third fundamental question to which both research traditions seek the answer: What leads to literacy? As will be shown below, each group approaches this question in different ways.

What Leads to Literacy?

Mangubhai (1999) conducted an experimental study to determine whether a particular educational intervention, the Book Flood Project, led to higher levels of reading skill among participating students in Fiji. Other quantitative researchers have also utilised statistical methods to examine the impact of schooling on literacy outcomes. In their study of women, literacy, and health in rural Mexico, Dexter et al. (1998) hypothesised a relationship between the length of women's childhood schooling and their performance on health-related language and literacy tasks, with data gathered through direct assessments and interviews and analysed through regression analysis. Using another statistical method, Ezzaki et al. (1999, p. 184) sought answers to the questions, "Does Quranic pre-schooling experience facilitate literacy acquisition among rural Moroccan children in primary school? Does any initial advantage carry over into later years of public schooling?" With data collected from a direct reading assessment and students, parents, teachers, and school records, they employed analysis of variance (ANOVA) to determine reading skill differences between Arabic- and Berber-speaking children who had or had not attended Quranic preschools.

In studies more focused on the characteristics and practices of schooling, Fuller and his colleagues attempted to determine, through regression analyses, the relative impact of a variety of school-related factors on literacy in English among children in Botswana (Fuller et al. 1994) and early literacy among children in Brazil (Fuller et al. 1999). With data gathered from direct assessments, classroom observations, teacher and principal interviews and questionnaires, they sought insight into the impact of factors such as school size, class size, textbook supplies, teachers' qualifications and job satisfaction, the frequency of active reading and writing exercises in class, and student time engaged in and disengaged from learning tasks.

In dealing with the question of what leads to literacy, these quantitative studies addressed the more specific question of what interventions or inputs contributed most to the acquisition of literacy. In the

evaluation study of a Turkish functional adult literacy programme, the focus of attention was on the input of a literacy course (Durgunoğlu et al. 2003). To determine whether the input was effective and gauge the relative success of the programme, the researchers compared the pre- and post-test scores of its participants, and compared test scores of participants with non-participants. Some non-significant differences between pre- and post-test scores were explained as a result of the insufficient duration of the literacy programme.

In a qualitative study which also evaluated four literacy programmes in rural Mali, Puchner (2003) conducted interviews with and observations of individuals who did or did not become literate after participating in the literacy programmes. In this case the focus was partly on the quality of the input. To explain the relative lack of success, Puchner identified the shortsightedness of programme developers, weaknesses and neglect of the programmes for women, and poor classroom conditions. At the same time, in addition to input-related factors, she identified various social factors, including relations between men and women, gender roles, constraints on women's access to classes, and perceptions of limited use for literacy in the local language, which offered insight into participants' reactions to and attitudes towards the programmes and their expected outcomes. Here, the qualitative researcher's approach to the question of what leads to or hinders literacy was to ask how the attitudes of potential literates towards literacy and literacy education affected their relative success in becoming literate.

This approach to the question is shared by researchers conducting other qualitative studies. Betts (2003) reported extensively on and interpreted the views of rural people in El Salvador with regard to their participation in literacy programmes. Moving beyond explanations of low participation rates in terms of barriers to access and lack of motivation, she detailed the "politics of absence", characterised by resistance to and co-optation of dominant discourses of literacy as power. Other qualitative studies privileged the views of informants in offering explanations for participation, or lack thereof, in literacy programmes. Rockhill (1993) learned from her interviews with Mexican immigrants in Los Angeles that women's efforts to become literate were hindered by the power their husbands held over them in the form of allowing or disallowing them to go to school, and that becoming educated and literate may have represented a form of resistance to this power. Dyer and Choksi (2001), initially intending to propose literacy inputs which they believed would be

appropriate to their nomadic subjects' way of life, found that the Rabaris' participation in the process of literacy acquisition was constrained because they did not share similar views on participation with designers of a literacy programme.

Maruatona's (2004) study of the Botswana National Literacy Programme (BNLP), based on interviews with literacy education planners, also drew on the idea of a gap between the intentions of planners and participants. Maruatona argued that the programme was an embodiment of the state's hegemony, and demonstrated that state bureaucrats' failure to consult learners in planning the programme resulted in gender and minority issues being ignored and learner participation being constrained. This qualitative policy study also dealt with the basic question of what leads to literacy, but focused on inputs into the policy process and characteristics of policies which were advantageous or disadvantageous to achieving higher levels of literacy.

With regard to positive policy inputs, Warsame's (2001) historical study identified a 1970s government decree to make written Somali the official language of politics, administration, and education as a major factor in the promotion of literacy in Somalia, where schools had previously operated in Italian, English and Arabic. In their historical survey of literacy campaigns in 13 societies, Arnove and Graff (1992) derived a series of factors leading to the effectiveness of national literacy policies, including that literacy efforts needed to be of sufficient duration, that local initiative needed to be mobilised, and that literacy must be understood within its various contexts.

Finally, several qualitative policy studies have examined the effects of international-level influences on the relative success of national-level literacy policies. Mpofu and Youngman (2001) maintained that the dominance of a traditional approach to literacy in international discourse which heavily influenced national-level policies in Botswana and Zimbabwe resulted in relatively ineffective literacy programmes. Mundy (1993), in her analysis of literacy policies in southern Africa, argued that literacy efforts and outcomes could not be understood without taking into consideration external determinants, including changes in the world economy and Africa's worsening position within this economy, as well as the influence of the aid and expertise of international agencies on the development of national literacy policies.

What are the Consequences of Literacy?

Qualitative studies dealing with the question of the consequences of literacy have described the uses to which literacy is put, presented the perspectives of new literates themselves, and interpreted outcomes from literacy based on a holistic picture of the contexts surrounding literacy use. Aikman (2001) found that her Harakmbut informants considered that among the outcomes of literacy in Spanish were an ability to promote their programme for self-development and greater access to resources to promote their indigenous rights. The Nepali women literacy programme participants in Robinson-Pant's (2000) study felt that they had gained a new form of public identity as "educated". At the same time they had gained a social space (the classroom) and a private space and individual voice, as represented by their writing for private and public purposes. The Hmong immigrant men observed and interviewed by Weinstein-Shr (1993) gained from literacy a tool for negotiating with new public institutions, a tool for mediating between Hmong and American cultural groups, a new social status, and a tool for studying Hmong oral tradition. Similarly, Maddox (2005) interpreted that the literacy of his Bangladeshi women informants represented a challenge to patriarchy as it strengthened women's position relative to men and allowed them to establish their rights. At the same time, literacy created for women new forms of risk and vulnerability related to their new ability to engage with public institutions and conduct private correspondence.

Robinson-Pant (2001) attempted to explore, through ethnographic methods, how women's literacy was linked to health outcomes among participants in a literacy programme in Nepal. She reported similar results as Puchner, that despite differences on a test of health knowledge, the health seeking behaviour of participants and non-participants was quite similar. Explaining the results, she wrote:

Detailed lifeline interviews showed a very complex picture in relation to how health decisions were made. Rather than demonstrating women's lack of awareness, the interviews revealed a catalogue of poor health services, inadequate family planning counselling, husbands' or in-laws' opposition to family planning and the low value attached to the birth of a girl which forced women to keep trying for a son (pp. 161–192).

In contrast to the holistic picture of literacy and health behaviours gained from Robinson-Pant's interviews, several quantitative studies looking at

the consequences of literacy narrowed their focus to a fixed number of objective, operationalised, measured factors. Dexter et al. (1998) took the number of years of schooling of their rural Mexican women subjects as a measure of literacy to examine whether correlations existed with a direct assessment of health-related spoken and written language tasks. Schnell-Anzola et al. (2005) were interested in determining whether literacy skills mediated the relationship between schooling and health. With data from interviews with 161 Venezuelan mothers and direct assessments of their literacy and health-related communication skills, the researchers hypothesised that the path from mother's schooling to child's health outcomes consisted of four steps: years of mothers' schooling would affect literacy and language skills, which in turn would affect health-related skills such as understanding health messages, which in turn would affect mothers' utilisation of health services, which in turn would affect children's health outcomes.

Other quantitative studies sought to investigate the economic consequences of literacy. Data from the International Adult Literacy Survey revealed relationships between the Survey's direct assessment of functional literacy and individual economic success as measured by individuals' earnings. As Darcovich (2000, p. 375) wrote:

Workers with higher literacy skills generally earn more than those with lower literacy skills, although this effect is not consistent across all levels and countries. Where the effect of literacy on income is present, it is evident even when accounting for gender, parental education and respondents' education.

Here the researchers utilised statistical controls to simplify the type of complex situation Robinson-Pant observed in her small-scale but holistic qualitative study.

Conclusions

The studies of literacy presented above can be seen to exemplify the basic characteristics of their respective methodologies. Among the quantitative studies, in particular those that engage in cross-national comparison, are those that seek generalisable explanations across contexts. Some of them seek to identify relations of association and causation through experiments and statistical models and techniques. Their research questions and hypotheses tend to be clearly stated at the outset, followed by methods

carefully described: sampling, sources of data, measurement of variables and data analysis procedures. Theoretical concepts, including literacy itself, are operationalised as variables which researchers attempt to measure accurately. Data come from direct assessments, reading tests, structured questions and detached observations. The voices or opinions of the research subjects are rarely heard.

The qualitative studies, on the other hand, tend to be based more fully on the views of the subjects of research, including the meanings they attach to literacy and the reasons and explanations they themselves provide. The qualitative studies focus more on specific, small-scale contexts. Rather than being limited to particular variables, they try to provide a holistic picture of the meanings, uses and practices of literacy. They tend to be exploratory and expository, with reports of the research not following a fixed structure or stating questions or hypotheses at the outset. Descriptions are detailed and infused with interpretation and theorisation.

Despite these differences, both approaches are concerned with at least four basic questions regarding literacy, with their differences contributing to more complete answers. How can we accurately define and depict literacy? Quantitative researchers answer that we need a way to measure literacy skills more accurately. Qualitative researchers answer that we need to find out how people themselves actually use and practice literacy, not relying only on what external actors say about how literacy skills should be used.

Where do variations in literacy lie? Quantitative researchers answer that to address this question we should measure differences in literacy skills among groups and determine whether these differences occur by chance or are significantly different. Qualitative researchers answer that we should examine how the meanings and uses attributed to literacy by one individual or group differ from others.

What leads to literacy? Quantitative researchers answer that we should try to determine what inputs (which may or may not be altered) can improve literacy skills or literacy rates. Qualitative researchers, assuming the input of literacy education, answer that we should find out how the attitudes towards literacy and literacy education of participants may facilitate or hinder their acquisition of literacy. Qualitative policy researchers answer that we need to find out what policy inputs contribute to or hinder effective literacy promotion efforts.

What are the consequences of literacy? Quantitative researchers answer that we need to determine whether and how literacy contributes to the betterment of other aspects of personal and social life. Qualitative researchers answer that we should not neglect the question of whether new literates experience adverse consequences in addition to the benefits of literacy.

From this chapter's focus on one issue and the comparison of studies taking one or the other approach to researching this issue, what can be added to the methodological debate between quantitative and qualitative methods and on the question of whether these methods are compatible? To answer this, a hypothetical question may be posed: What if we only had the insight into literacy of one or the other of these methods? What if, for example, we only knew what literacy meant to literates themselves and how they made use of their perceived literacy skills, but did not have insight into whether based on their own judgment of their skills they could perform the tasks society expects of literates? What if we knew only of what educational inputs contributed to increased literacy, but not of the subjective factors which influence people's decisions about whether or not to attend school or whether they consider the content of literacy education appropriate or relevant and therefore worth retaining? Thought of in this manner, it becomes clear that despite differences, or the strengths and weaknesses of each approach, only with both approaches can scholars come to a more complete understanding of important educational issues.

A final question addressed in this chapter is how both quantitative and qualitative approaches have been used with respect to explicitly comparative educational research. Of the literacy studies surveyed in this chapter, the ones which to a large extent dealt with comparisons across countries were cross-national quantitative studies of literacy achievement. Quantitative approaches were also used to compare literacy rates, skills and achievement across places below the national level. Even when limited to one place, quantitative studies did engage in explicit comparisons on a variety of types, including ways of measuring literacy skills, innovative and classical teaching methods, schooling experiences, curricula, language groups, and inputs and outputs. The qualitative studies described above, with their attention to context, focused mainly on one place, often down to the district and village level. However, as with quantitative studies, these qualitative studies also dealt with comparisons along various dimensions at the levels of policy, culture and individuals,

including the various meanings of, uses of, values attached to, inputs to and outcomes of literacy.

The Place of Experience in Comparative Education Research

Patricia POTTS

As the chapters of this book illustrate, there are many possible kinds of comparison involving theoretical concepts, political ideologies, whole cultures or individual cognitive skills. In some research traditions, abstractions may more often be the focus of educational research than detailed case studies of teaching and learning relationships. In cultures with a clear distinction between theory and practice and where theory has a higher status, it may be difficult to argue for the value of learning from experience. Theory may even develop in isolation from practice. For example, a commitment to cultural harmony and perfection, or to consensus in politics, can make it difficult to present everyday life as a legitimate focus of enquiry. In these cultures, the ideal may be more important than the real, with “life stories” having value only as controlled exemplars – model stories, contributing to a shared and unifying cultural identity. Cultures in which social research aims to reach the kind of truth thought to characterise the physical sciences find it hard to accommodate the uncertainties of analysing and resolving the problems that people actually experience.

I propose a broad definition of comparative education research that acknowledges the cultural complexities across and within the borders of different countries. Research undertaken at home can be as comparative as that undertaken abroad. I also argue that making sense of teaching and learning relationships is a central task of educational enquiry. This social dimension brings a complexity that makes it impossible fully to control or measure with precision the interrelatedness of particular factors. Insofar

as social research requires communication and understanding between people of differing perspectives, then social research is also comparative.

My background is in history, psychology and philosophy, and I have taught in schools and universities. I have undertaken cross-cultural enquiries into the relationships between competitive excellence and social inclusion in education in Britain and China, and this work has prompted a number of reflections and conclusions (Potts 2003). In trying to describe and analyse the realities of the social situations that I was investigating, to omit the experience of those involved would have been to neglect the very focus of the study itself. I also came to realise the importance of matching content to appropriate methods of enquiry, and to see that questions of method formed part of the content of my research – that they were issues for interrogation rather than unchallenged acceptance. Further, some factors affect research in significant ways but are neither routinely acknowledged nor brought within the compass of the public research process. One example concerns the differences in status and interest among those involved.

In this chapter I set the discussion of comparative educational research within its social, moral and political contexts. I describe an approach to social research that is lifelike, equitable and useful. I begin by illustrating how Western educational research set out to be objective science and discuss the consequences for social research of the kind of knowledge that was expected or desired within this paradigm. Then I present alternative conceptions that view social research as closer to the humanities. Throughout this chapter, I draw on examples which explore the relationships between Western and Chinese ideas about educational research.

I argue, first, that developing a critical approach to social research entails reflecting on your own experience and making connections with that of others. Second, I suggest that developing an equitable approach entails giving a voice to a range of participants. Third, I observe that developing a useful approach entails active engagement with audiences, policy makers and practitioners.

The Objectivity of Comparative Educational Research

Two of the most enduring influences on comparative education research have been the philosophy of the European Enlightenment and the theory and practice of Western psychology. In his *Discourse on Method* (1637),

René Descartes argued that mind and body were conceptually distinct but that there were parallels between the external, material world and the internal world of thought: both could be understood in rational, logical terms, and their interactions were law-like. Similarly, there were parallels between nature and society, and therefore insights into the regulation of the natural could be transferred to the social world. Scientific knowledge and the light of reason would be applicable to both.

During the 19th century, when mass education systems were first elaborated in Europe and North America, Enlightenment ideas influenced the standardisation of teaching and learning. This included the use of space and time in schools, the grouping of students, the organisation of curricula, and the measurement of attainment (Hamilton 1989). Cartesian arguments can be read clearly in the writings of contemporary educators, such as Craig (1847, p. 109):

A normal school ... is a moral daguerreotype, an apparatus for concentrating the scattered rays of knowledge regarding the natural and moral laws and bringing them to bear upon the actual purposes of life. The science of education consists in a knowledge of these laws.

The classification and rational ordering of each aspect of new public social institutions, such as schools, was a sign of modernity and Enlightenment values. Unwin (1849, p. 3) similarly stated that the “science of education has been gradually developed, evincing, like other branches of human enquiry, the laws of progress”. This view of knowledge and enquiry implied a continuum of progress, a linearity that came to be taken for granted rather than disputed. The laws of science would provide secular certainties, in the social as well as the physical world, which would be discovered by testing predictive hypotheses, by controlling relevant “variables”, and by elaborating systems of naming and classification. This kind of enquiry was observational and empirical; it was not participatory.

In the early 20th century, psychology emerged as a discipline distinct from philosophy, but the study and classification of school students was at that time the responsibility of medical doctors. Several decades later, educational psychologists took over this role, inheriting a rich tradition and a powerful practice. At the core of their work was intelligence testing – quantitative assessments of children’s present and future attainments, derived from theories about innate and fixed ability. Individual differences were of interest insofar as they shaped the graphic

representation of the ability of whole populations. Whereas Enlightenment educators had developed child-centred ideas based on a newly positive and optimistic view of childhood (Porter 2000, p. 340; Jones 1912, p. 59), their successors' priority became classification systems for the identification and control of unprecedented numbers of school students.

The high status of experimental methods of enquiry gave academic psychology a privileged status in educational research that in some countries, such as the UK, was not seriously challenged until the late 1970s when researchers began to argue for the relevance to children's learning of personal, social, cultural, economic, cultural, geographical and political contexts (Donaldson 1978; Walkerdine 1981; Tomlinson 1982; Woodhead 1990; Burman 1994). British feminist philosopher and educator Griffiths (1995, pp. 38, 56) agreed with this challenge, arguing that the abstractions of Western rationalism were inadequate for making sense of difference:

To say that using theory is of limited use is not to say it is of no use at all. Rather, it is to emphasise that other means of engaging with a variety of perspectives also need to be found if difference is to be properly acknowledged in any future theorising ...; Challenges to the tradition are part of a general philosophical move away from the hope of Newtonian or Cartesian certainty and away from a reliance on an objectivity ... which will produce universal truths.

Brazilian educator Paulo Freire asserted a similar view. There is "no such thing as absolute ignorance or absolute wisdom", he declared "What is true today may not be true tomorrow" (1974, p. 44).

The Subjectivity of Comparative Education Research

Alternative conceptions of educational research have implications not only for matching research questions to appropriate methods of enquiry and analysis but also for more fundamental questions about epistemology, that is, what kind of knowledge can be expected from enquiries that are social. The theoretical perspectives I illustrate here give a central role to learning from experience – the experience of researchers as well as that of research participants.

A Self-Reflective Approach to Educational Research

British educator Stenhouse defined educational research as “systematic self-critical enquiry”. Further, he saw useful research as being closer to history than to science (1981, p. 104):

While the hard sciences produce our hardware, history produces our software: it is the expression of a systematic critical enquiry into the fruits of our experience.... Science aspires to generalisations which are predictive and universal, whereas historical generalisation is retrospective and summarises experience within boundaries of space and time.

Other writers have agreed that self-reflection is a necessary component of critical enquiry and that our experience plays a vital part. Mills (1978, p. 44), for example, stated that: “To deny the fact that our life experiences influence our work profoundly is to reject the notion of scholarship itself.”

Using Stories to Make Connections

British writer Emma Stone provided her own perspective on the relationship between experience and the elaboration of theory. Reflecting on her study of social policy for disabled people in China in the mid-1990s, she described the ways in which she had used stories to make connections. She challenged assumptions of the low value of accounts of everyday experience as sources of information, and argued that, though individual, such stories were “not unique”. Stories link up when set into their wider contexts; and the greater the extent of the connections, the greater the resonance with people from different cultures. Stories, Stone suggested (1999a, p. 174) are both strange and familiar:

There is something in these stories that seems to ring true across many different cultures and countries. And yet ... still there is something that ties them to China in the 1990s. The stories are the product of a complex interplay of factors and processes, past and present, partly global yet indisputably Chinese.

Particular stories generate further questions and investigations, expanding cycles of enquiry. Stone told the story of three Chinese children who had been identified as disabled, and then illustrated some of the ways in which their lives connected with each other and beyond. Immediate factors included the impact of rapid socio-economic change on households,

domestic perceptions of disability, networks of available support, national social policies (especially China's one-child policy), and the rehabilitation industry. Stone concluded (1999a, p. 188) that the views of individual participants were fundamental and therefore valid.

Constructivism

American teacher-educator Gallagher wrote (2000, p. 3) about the consequences of not adopting a self-critical approach to teaching and learning. She argued that pedagogical conventions in which teaching is seen as a "technical-rational" exercise resemble the positivist approach to social research because both reveal "a mind-set deeply situated in the search for an objective external authority in which to ground the ... process, something outside of oneself to which individual educators can demonstrate professional accountability". She therefore proposed an alternative conceptual framework for restoring to teachers (and researchers) the belief that they were engaged in "meaning-making". Gallagher (p. 16) looked to constructivism on the grounds that it

affirms that knowledge is constructed (made) rather than discovered (found); and, as such, all knowledge is inseparable from the individual learner's language, experiences and culture Constructivism recognises, rather than attempts to ignore, human consciousness and moral autonomy.

American child psychologist William Kessen visited China in 1973, and found that his experiences prompted him to revise fundamentally his view not only of children but also of social knowledge (Kessen 1975, pp. 216–217; 221):

The outstanding feature of childhood in China, and that which raises the most basic problem, is the high level of concentration, orderliness and competence of the children. We were impressed by the sight of fifty children in a primary classroom quiet until addressed and chanting their lessons in enthusiastic unison when called upon, even more impressed by the apparent absence of disruptive, hyperactive and noisy children The docility did not seem to us to be the docility of surrender and apathy; the Chinese children we saw were emotionally expressive, socially gracious and adept There seemed no commanding need either for theories of classroom "management", or, let it be emphasised, for theories of child development We left China convinced that we had seen

radically different ways of thinking about and meeting children from the ways we knew as Americans.

Reflecting on these experiences a few years later, Kessen wrote that the child "is essentially and eternally a cultural invention and ... the variety of the child's definition is not the removable error of an incomplete science" (1979, p. 816).

Ethnography

The concept of ethnography covers both the process of research, here involving qualitative methods of enquiry, and its product, a written text. When it is undertaken in cultures that are unfamiliar to the researchers, ethnography is nearly always comparative. Characteristics of the process of ethnographic research include immersion in the cultural world of participants, with communication in participants' languages, observation and the compiling of detailed fieldnotes. Ethnographers are seen as actively involved in discussing with participants the meaning of their lives but without setting up or controlling any artificial, "experimental", situations. A subsequent report consists of the interpretation of both the detail of individual lives and the social, political and other relevant contexts. There is no single format for ethnographic work that is subscribed to by all ethnographers, and there are debates about the character of its constituent parts, for example the relationship between subjectivity and objectivity in participant observation. Several characteristics of ethnographic research are relevant to a discussion of the place of subjectivities in comparative educational research. These include the role of the researcher and the view of knowledge that underpins ethnographical interpretation. In this discussion I have drawn particularly on an ethnographic study of education in China (see Liu et al. 2000).

The following view of the relationship between ethnographers and their research clearly echo Stenhouse's definition of educational research, firstly, as systematic self-critical enquiry and, secondly, as belonging to history rather than science (Ross 2000, p. 132):

One of the most important lessons I learned during my first moment in the field of Chinese schooling was that "cultural" explanations of social processes, including teaching and learning, construct, as well as explain, difference I also began to question scholarship that essentialised culture and forgot history. Good school ethnography must situate careful, honest portrayals of the daily, "cultural" lives

of individuals within history. This lesson came to define my approach to ethnography.

Kelly (2000, p. 16) argued that the relationship between ethnographers and the contexts of research and its production was inescapably moral and political:

Since no society exists where the few do not benefit at some social cost to the many, deconstructing the epistemological bases for systems of domination and subordination has the potential to increase individuals' awareness of how the world is and how critical ethnographers think it could be The combining of ethics with politics can be seen in the way ... that critical ethnographers are concerned with the dual meaning embodied in the word *subject*. That is, individuals can be *subjected* to any number of authorities and they can also be *subjects*, active participants in shaping their own lives. (italics original)

Ethnography, like educational research in general, has its roots in Enlightenment thinking about a rational journey of enquiry that would end in a map of objective truth. However, critical ethnographers today perceive that their work has a different politics and derives from quite different epistemological assumptions (Ross 2000, p. 147):

It may not be surprising, given my stake in comparative education, that I have come to understand that what is involved in ethnographic work is similar to what is involved in the development of more democratic schooling. Both endeavours involve learning how to listen and to confront power, and how to talk across differences. Both endeavours also involve realising that our behaviour – including the ways we teach and conduct research – is a cultural product.

I have come to see comparative educational research as a series of return journeys whose result would not be an objective, complete, accurate scientific map. Further, I now understand that a central task is to draw on what I have learned abroad to develop a more critical perspective on the UK. At a conference in 2000, a Chinese colleague talked about the UK and I talked about China. We moved away from describing or own systems to asking questions about each others'. Having education as our research focus gave us a potentially fruitful perspective on these journeys. As observed by Kelly (2000, p. 2):

Schooling is something we have all experienced and understand, and examining a foreign situation makes us more aware of the “hidden” curricular components that shape our educations. Ability grouping and tracking procedures are not used solely to differentiate levels of academic skills; they have cultural and social outcomes as well.

In many ways, these elements become more noticeable through comparative education because understanding another culture and society necessitates that we question concepts that normally go unquestioned. Asking “Why?” is at the heart of ethnographic research. Thus ... by looking at educational practices in China, we are given an opportunity to reflect back upon our own.

Interactionism

British sociologist of education, Woods (1983, p. 1), described his approach to making sense of life in schools as “interactionist”, which embraces constructivism, ethnography and autobiography. The focus of research is the detail of interpersonal relationships, from whose interpretation theoretical understandings develop:

Symbolic interactionism is [based on] the notion of people as constructors of their own actions and meanings. People live in a physical world, but the objects in that world have a “meaning” for them. They are not always the same objects for different people, not are situations interpreted in the same way. To some, school is a joyful and liberating arena, to others it may appear dull and restrictive In other words they are symbols – they indicate to a person certain meanings which are dependent on them for their construction People interact through symbols.

The construction and sharing of meanings is made possible through consciousness of a “self” and the capacity to see the perspective of others. The interpretation of social meanings is therefore as important as any “objective reality”. Meanings are communicable because they are based on “key definitions”, which provide a common structure for individual points of view. Participant observation is the key method of interactionist research. It involves taking part in the ordinary everyday life of the group or institution under study in an accepted role, and observing both the group and one’s own self. The role is difficult, and includes the danger of losing the perspective of the researcher. Nevertheless, close observation and

sympathetic interviewing over a lengthy period can yield great insights. Further, as Woods added, rigorous procedures have now been devised for such work, to distinguish it as social science from purely intuitive and casual observation (1983, pp. 16–17).

The rigour derives from the “comparative analysis” of significant events, through which theoretical understandings are generated. This is quite different to the testing of *a priori* hypotheses that characterises the verification procedures of natural science and, indeed, sociologists are centrally interested in information that in principle could not be tested in the sense of measurement or statistical analysis. However, this does not mean that interactionist research cannot produce useful theory, nor even that such research cannot test theoretical concepts. Woods (1996, p. 67) describes the debate between positivist hypothetic-deductive methods and qualitative inductive methods as “unproductive”. Verification of theory remains important to interactionist sociologists; it may be, however, that some theories are unsound because of their disconnection from the empirical world.

In his book on using ethnography in educational research, Woods adopts an autobiographical approach to discussing the evolution of his professional commitments. He describes the excitement of discovering ethnography and interactionism, following the publication of David Hargreaves’ (1967) book, *Social Relations in a Secondary School*. Ethnography aimed to reflect and interpret real life, to give a critical voice to those who were marginalized in social settings, to locate problems in social structures rather than within individual students, to make the familiar strange. Ethnography would bridge the gap between research/theory and teaching/practice. Interactionism would make it possible to understand the conflicts, contradictions and inconsistencies of everyday life.

Insofar as Woods advocates “multivocal stories focused primarily on social criticism and critique” (Woods 1996, p. 8), he could be described as a postmodern qualitative researcher. However, he is opposed to exclusive alignments:

I do not see the world in this paradigmatic way.... While few would still subscribe to a view that there is an objective reality that is totally knowable, the modified view ... that there is an objective reality ... is still persuasive. Qualitative research in such areas is interested in both objectivity and subjectivity. How people think and feel, how they interpret and how they construct meanings are integral to the

approach What the new approaches have done is to offer new ways of apprehending these subjectivities, aesthetically and emotionally as well as cognitively; to emphasise the subjects' and the readers' engagement with the research and with the text respectively; and to bring more into consideration the researcher's own subjectivity and position as researcher.

Autobiography

A few years ago, two Chinese colleagues and I discussed how our own experiences of education had influenced our subsequent professional lives, and we exchanged brief written accounts. I concluded that my experiences had generated a commitment to studying the effects of competition, selection and privilege in education. One of my colleagues compared his schooling in the 1960s and 1970s with that of his son 20 years later and concluded that, while his own education had been damagingly understructured, that of his son was damagingly overstructured.

I include autobiographical material in my work as an educator in order to examine and be conscious of the origin of the questions that have been central to my professional life. Further, using my own voice and drawing on personal experience provides a model of an inclusive approach to research in which the voices of others are valued. Presenting something of myself prepares me to accommodate to others rather than merely to assimilate what they tell me into a framework that I construct in their absence. My own short autobiographical piece and that of my Chinese colleague are included in my 2003 book, as a preface and an endpiece, reinforcing the idea of research as a journey of enquiry, one that is both a completed sequence and a continuing cycle (Potts 2003).

In his book on China, which begins with a long autobiographical section, American psychologist and educator Howard Gardner says (1989, p. 15):

I have come to feel that my concept of creativity and the conclusions I have reached after two decades of research are inseparable from who I am, where I come from and which values are most fundamental to me.

Similarly, Lisa Rofel, an American scholar who spent 18 months living and working with Chinese women workers in a Hangzhou silk factory, appreciated that who she was would be explicit and that this would shape the politics of her research (1999, p. 35):

Never for a moment could I forget, not just that I was an American in China but that to many people there I represented the potential power to place them in the world through my textual production of China. Many of those I knew in China understood much better than I did ... the ways in which narratives situated in an unequal world can shape the face of global politics.

Life stories enable us to make sense, not only of diverse personal experiences, but also of shared “commonalities”. Davin (1989, p. 273), who translated a set of Chinese autobiographies for English-speaking audiences, came to a similar conclusion:

The more I read the life-stories the more I was aware how closely each was shaped by the times in which the subject lived. ... I was immediately struck by how little the state had directly impinged on individual lives before the establishment of the People’s Republic of China and by the sharp contrast after 1949 A comparison of the interviews of men and women gives some sense of the difference in the way they have experienced the transformation of their lives Such material is even rarer for China than it is for the West. It must of course be used with due caution, but it certainly has real potential for advancing our understanding of the social history of China.

Paradigms and Diversity

What constitutes “research” is different in different cultures. This means that comparative enquiries must consider differences of perspective, not only in relation to the focus of the research, but also in relation to theory and method. I have observed that many Chinese colleagues respect the experimental approach of classic Western educational psychology even when they have not themselves carried out research of this kind. The educational “experiments” I have seen are projects connected with the implementation of new policies, monitored by researchers but not directed by them. Further, it seems to me that China’s adherence to the view of educational research as a science derives from its own cultural and political values rather than from a shared cross-cultural perspective. For example, there are fundamental differences in ideas about ability and learning between China and Western countries, which derive from different views of the relative influence of heredity and environment and different views of what it means to be a child or adult in society. The

conduct of experimental research in individualistic cultures cannot be compared to the same paradigm utilised in communitarian cultures.

Further, it seems to me that interactionism, based on the interpretation of everyday experience and supported by influential British sociologists of education, because it is predicated on the idea of the autonomous "self", might not be intelligible in cultures that do not share this basic tenet. European philosophy derives from Descartes' assertion of a fundamental distinction between mind and body. Chinese philosophy does not recognise this distinction (see Stone 1999b). Cross-cultural research entails appreciating and exploring the meanings of difference.

My Chinese colleagues do not usually share my view of comparative educational research. I brought my constructivist approach to social research with me from the UK, but my Chinese colleagues were looking for something more solidly scientific, objective and authoritative. Another Western writer (Ross 2000, p. 131) describes a similar experience:

Postmodern research and its vocabulary clash with how the purposes and aims of social science are defined by mainland Chinese scholars, whose disciplinary and methodological claims remain guided by a faith in modernity, with its core belief that human beings can progressively shape themselves and their worlds The critical posture adopted by scholars who see themselves and their work as implicated in power relationships is often at odds with how Chinese teachers and administrators, like my principal, view the purpose of research, which is to identify, even celebrate, "good" educational practice.

However, there is some evidence from Hong Kong and mainland China that these views may be changing. Discussing the introduction of autonomous learning for older school students by means of project work in geography, Chan (2001, p. 200) concluded that the positive effects of constructivist instruction with Chinese students "suggest that learning approaches are not inherent in the learners; they could vary as a function of the learning contexts".

The Social Relations of the Production of Research

The social relations of the production of research affect enquiries in significant ways. For example, in comparative educational research, colonialism in the past and globalisation today have so far confirmed the domination of Western researchers and their academic territories. The

authority of approaches to research and the authority of those conducting research are linked. Those who value learning from experience and the theoretical perspectives that are based on this principle seek to challenge these power structures in both the form and content of their work. Drawing on autobiographical material models a reciprocal approach that attempts to share authority with other participating voices. These issues become more obvious when research projects involve groups who have experienced social devaluation.

British writer Dorothy Atkinson worked for two years on an oral history project with a group of nine people who had been classified as "having learning disabilities", and wrote a book reflecting on the research experience. Atkinson argued that autobiographies are a valuable source of information in a number of ways: they provide unique insider perspectives, they present a picture of a whole person rather than a single aspect selected by someone else, they act as a counterbalance to the views of others, and they constitute a political document because shared understandings and heightened consciousness can exert pressure for social change. Atkinson's work brings hidden lives into the mainstream of research and policy making. Insofar as this involves revealing and making sense of cultures very different to those of researchers and subsequent audiences, this work is both social and comparative.

Atkinson (1997, pp. 133–134) analysed the role of "auto/biographical" research within its historical, Western, context, describing it as a late 20th century phenomenon:

It can be seen as one manifestation of wider changes sweeping society in its so-called "post modernity" phase. Modernity itself was characterised by certainty, a certainty that the application of reason and rationality would lead to scientific change and economic progress, and that grand schemes would bring about lasting and beneficial change. In the learning disability field, the identification of "mental deficiency" and its "treatment" in institutions, was an expression of modernity and "modern" thinking The professions of medicine and psychology became important in the quest, first, for care and, later, for containment and control. Over time institutions fell into disrepute. "Experts" became less revered. Measurement, classifications and the treatment of "deficits" looked more suspect.

The postmodern phase in learning disability came, Atkinson suggested, with the growing realisation that institutions and experts had failed people

with learning disabilities. In this context it became possible to move from ideas about universalism and standardisation, for example, to a recognition that people are actually different and have diverse needs. She continued (p. 134):

People in the self-advocacy movement ... have begun to speak up about their experiences as people with learning disabilities and well as their needs as service users. Their auto/biographical accounts have helped counteract stereotypes about who and what they are, and they have begun to emerge as people with a diversity of backgrounds and experiences. The sweeping away of old certainties and authoritative voices has made a space for other voices to be heard. Auto/biographical research has helped to create that space and has helped ensure that those newer, and sometimes less certain, voices are heard.

If social research, within which I place comparative enquiries into teaching and learning, yields knowledge that cannot be characterised as objective or certain, this implies that methods of enquiry will be different from those found in paradigms that are expected to produce knowledge that is lasting and universal. However, given the powerful history of experimental psychology and the competitive nature of academic life, many researchers who sense these differences do not risk developing more appropriate techniques. Some even feel obliged to apologise for the unavoidable absence of objectivity in their work, and continue to force their projects into non-social theoretical frameworks. Mismatches include:

1. Balanced experimental designs that ignore significant features of the context of the enquiry – for example, a plan to interview equal numbers of boys and girls in an educational setting in which there are three times as many boys as girls
2. Research designs that set out to control the uncontrollable, either in the method of collecting information or in the approach to analysis, for example the reduction of social attitudes to simplified bipolar scales that are then analysed statistically
3. Research that discusses people's lives without illustrating them because the pressure to be representative and reliable prevents the inclusion of any details of individual lives in favour of conflating the responses of large numbers of participants and/or translating them into statistically testable sets of numbers

4. Research that argues for the value of self-reflection that is, itself, not self-reflective
5. Social research that has no "I", a contradiction familiar to many postgraduate students who are required to be original but not in their own words
6. Research that omits the culture of the researcher, for example "comparative" research that consists entirely of material gathered in one culture; this used to be a characteristic of colonial-style Western comparative educational research, and can also be found in articles written by those from cultures that are relatively powerless in global academic terms

These mismatches are clues to the social relations of research production. Search through the journals and find your own examples. What do you think they can tell us about doing research? How would you resolve the mismatches?

Paradigm War and Peace

In this chapter I have argued for a central role for experience in social research, within which I place comparative educational enquiries into teaching and learning. I have argued that social values cannot be separated from social "facts", and I have therefore made links between the valuing of experience and research that is aware of its moral, political, cultural and personal contexts (see also Midgley 1989).

The perspectives I have illustrated are characterised by the use of qualitative rather than quantitative methods of enquiry, but I do not therefore attribute to qualitative methods any kind of special status outside the discussion of social research. What concerns me is the common mismatch between content and method in educational research, which is the result of the privileged status of certain academic disciplines and the inequalities between research communities in different cultures, both of which may be difficult to challenge. Paradigm wars do exist, and they polarise disciplines, genders and wider cultures. The opposition of qualitative and quantitative methods of enquiry reflects other kinds of opposition. Resolving the dispute might be achieved not through a conclusive triumph of one view over the other but through a reassessment of their relationship.

British writer Ann Oakley has studied the lives of women, particularly their experience of housework, childbirth and health, and her

working relationships with doctors have stimulated her critical thinking about approaches to social research. By the 1980s, she had become aware of how enduring was the influence of Enlightenment philosophy (Oakley 2000, p. 16):

The predominant paradigm today is one that favours rational knowledge over intuitive wisdom, and quantitative rather than qualitative forms of knowledge; it is based on the unquestioned validity of Descartes' famed mind-body dualism, one that presupposes a mechanical division between emotional and material existence There are many signs of the growing misfit between this mechanical paradigm and the dynamics of the world to which it must constantly be applied as a putative explanation.

She points out the existence of dominant and marginalised ways of knowing, and that different research methodologies are "gendered" and therefore unequal. However, instead of rejecting the dominant, masculine, approaches, she argues that women should take more control of them (Oakley 2000, pp. 19, 21):

Just as sociology ought to be refashioned so as to provide a sociology *for* women which begins from everyday experience and is free from prejudicial stereotypes ..., so also there would seem to be a strong case for an experimentation for women – an activity in which women themselves would actively participate and strive for the goal of an emancipatory social science The goal ... is a democratisation of ways of knowing ..., and also a synthesis [of quantitative and qualitative work], so that the focus is on choosing the right method for the research question. (*italics original*)

Disciplined Research?

So, what are appropriate topics and sources of information for comparative educational research? People who take the approach of experimental psychology may be interested in students' mathematical abilities, for example, or in how their memories for languages can be improved. They may be tempted by the conventions of experimental design to exclude relevant contexts for the sake of a balanced and clearly framed project. In contrast, people who take the approach of ethnography may be interested in making sense of an educational community, for which the investigation of poverty or racism may be important. Different theoretical, moral and political commitments shape the questions that researchers want to ask

and how they set about answering them. Ethnographers may also be interested in students' experiences of learning mathematics, and experimental psychologists may be interested in prejudice; but some approaches are better equipped than others to make sense of social realities and irreducible differences of view. Sociologists Woods (1996) and Oakley (2000) both argue, from quite different theoretical positions, for a variety of methods of enquiry. If comparative educational research is to be illuminating and useful, it cannot be the preserve of a single academic discipline.

Different kinds of research questions shape different kinds of enquiry. The clearer the questions, the easier it is to determine the range of relevant sources of information and methods of analysis. In social research, relevant sources of information include accounts from a diversity of personal perspectives, the collection and comparative interpretation of which is a researcher's creative and critical responsibility. There is no one right way to undertake social research, only the attempt to match form and content, to refine a research question and set out to answer it using appropriate methods of enquiry and analysis. For example, if the research question is social, then it is likely that biographical (first-hand, descriptive, critical) material will illuminate the issues to be investigated. This material can, of course, be "professional" as well as "personal". The researcher will have a set of questions to ask, but participants may have their own questions and a range of unsolicited views on what is or is not important in the answering of the questions. Not to listen to these views would be a contradiction, like saying you want and do not want to learn from your participants. Calculating an appropriate balance of control and freedom, for both researcher and participants, is the skill of the critical, imaginative, researcher and will be eased by the clarity of the original question.

Conclusions

Social research, into which category I place comparative enquiries into teaching and learning relationships, is complex, and its findings are inevitably uncertain. Such research challenges the linearity of positivist theorising and interrupts the expectation of progress (see Foucault 1972). I have argued that an appropriate methodology for comparative educational research is to be found within the humanities rather than science. I have argued for an approach to social research that is critical, equitable

and useful, i.e. which is moral and political as well as reasoned. Each aspect carries its own responsibilities.

Critical commentary, in whatever medium, is assertive and would be contradicted if presented in a third person narrative. If self-reflection and self-definition are necessary for the development of our own critical voices, it follows that voices will be presented in the first person. If we write in the first person and express our own, questioning and autonomous voice, it follows that we shall use our own words. If writing in my/your own voice is a foundation for developing a critical approach to making enquiries, then listening to the voices of others is a foundation for developing an approach that is equitable. In my view, self-critical consciousness is integral to comparative educational research. This gives a high value to learning from experience.

If enquiries take place in contexts where reflection and self-reflection are not possible, for example where cultural, political or academic values are transmitted unquestioningly, then learning from personal experience becomes irrelevant. Research into the realities of other people's lives, for example in classrooms and staffrooms, also becomes irrelevant and so cannot be utilised as a basis for developing social policies, such as those for education. The connection between policy and practice then becomes loose. If questions are not asked for example about students', teachers' or academics' perspectives, then overcoming barriers to learning, teaching and researching will be difficult. In the context of education, the devaluation of learning from experience seems particularly wasteful. Social knowledge is dynamic, unstable and contingent, but this reduces neither its scope nor its value.

II: Units of Comparison

Comparing Places

Maria MANZON

Comparative education analyses have traditionally focused on geographic entities as the unit of comparison. As this book demonstrates, comparisons can be made across many other units of analysis, including cultures, policies, curricula and systems. Nevertheless, even these alternative domains are inextricably bound to one or more places. In this respect, examining geographic entities as foci of comparative inquiry is an essential step for comparative study of education.

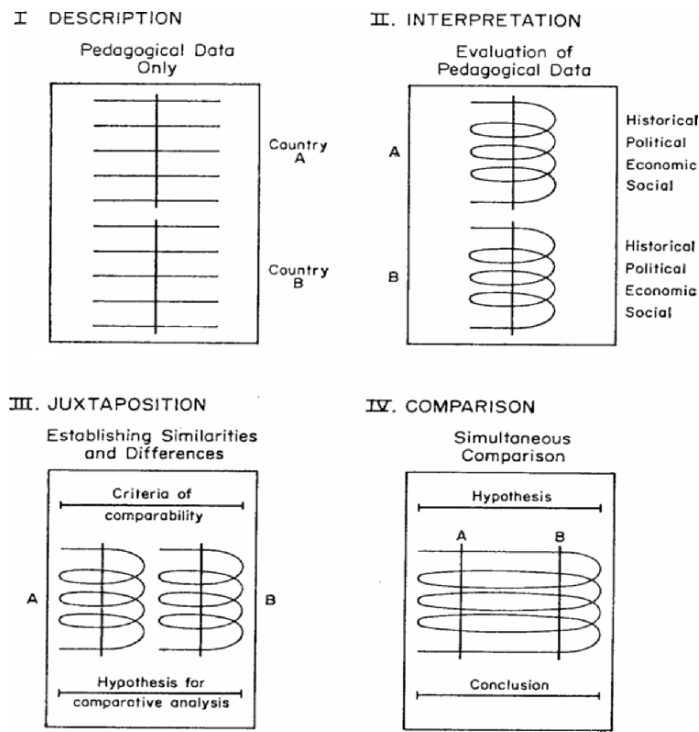
Bray and Thomas (1995) designed a cube for classifying comparative studies in education by level and type. They emphasised that the classification was not exhaustive, and that additional units could be identified. This chapter focuses on the geographic/locational dimension of that cube, and explores other units that are not explicitly identified in it. Using the Bray and Thomas article as a benchmark, the author examines literature that had appeared since publication of the article. This exercise has three main objectives: first to trace the discourse about units of analysis since its publication; second to make explicit some of the units that were implicit in the Bray and Thomas model; and third to select examples of the uses of places as units of comparison, at single levels and at multiple levels, in order to identify methodological issues.

The chapter is structured in four sections. The first comments on some general approaches to comparative inquiry in education, and is followed by further remarks on the Bray and Thomas model. The third and longest section of the chapter focuses on the locational dimension, presenting illustrations of geographic entities as units of analysis. The final section summarises some methodological points for scholars to consider when comparing places.

General Approaches and Tools for Comparative Education Analyses

Comparative studies in education have principally been locational in nature, examining educational phenomena in different places. Traditionally, these studies have taken as their unit of analysis large macro-social units and in particular the nation-state (e.g. Sadler 1900; Kandel 1933; Bereday 1964; Fafunwa & Aisiku 1982; Gu 1986).

Figure 4.1: Bereday's Model for Undertaking Comparative Studies



Source: Bereday (1964), p. 28.

Among the various purposes of comparison, two are noted here because of the ways in which they shape research methods: one is interpretive, and the other is causal-analytic. Concerning interpretive studies which seek to understand educational phenomena, Bereday's comparative method deserves comment. Bereday's (1964) classic book, *Comparative Method in Education*, conceived the field in terms of area studies (in one

country or region) and comparative studies (i.e. simultaneous comparison of several countries or regions). Of particular interest is his four-step method of comparative analysis (Figure 4.1), consisting of description, interpretation, juxtaposition, and simultaneous comparison. The purpose of juxtaposition, he suggested (pp. 9–10) was to establish a *tertium comparationis*, “the criterion upon which a valid comparison can be made and the hypothesis for which it is to be made”.¹

Figure 4.2: Points of Convergence in Different Settings

BRAZIL		SOUTH AFRICA
Aspect: Three main ethnic groups have influenced Brazilian culture: the indigenous peoples or 'Indians', the Portuguese Europeans, and the Africans, owing to Brazil's former use of slaves especially in coastal plantations.	Demography and educational consequences How have attributes of the population affected education?	Aspect: Around three quarters of South Africa's population is of African descent; 11% are of European descent (chiefly British or Dutch), 9% of mixed descent, and 3% are Asian, primarily Indian descent.
Response: Centuries of intermarriage and racial and cultural mixing have shaped the Brazilian population. A more unified and distinctly Brazilian 'race' has emerged as a result. Although few Brazilians have ancestry strictly of one particular group, over half of the Brazilian population describes itself as white.		Response: The doctrine of racial separation became particularly pronounced beginning with the apartheid-minded Nationalist rise to power in 1948, the 1953 creation of a system of 'Bantu' education, and later a school system for mixed race or 'coloured' people in 1963 and for 'Indian' people in 1965.
Consequence: Though evidence points to limitations in the educational opportunities of less privileged races, since most Brazilians claim the identity of the dominant or high-status race, there has been a general lack of acceptance that racism is a pronounced problem and a lack of recognition for its negative effects in terms of differentiated educational access.		Consequence: Apartheid's formal system of separation within these four distinct school systems adopted differential access and opportunity into its most fundamental formal structures until dissent, mounting in the 1970s and 1980s, led to the dismantling of the system and Nelson Mandela's election in 1994 as the first South African president from the racial majority.

Source: Kubow & Fossum (2003), p. 111.

¹ *Tertium Comparationis* is a Latin phrase which means “in the third place, comparison”. The term can be loosely translated as “the terms of comparison”.

A prerequisite for any comparative study is to establish the parameters for initial comparability of the chosen units of analysis. In general, instructive analysis can be made when the units for comparison “have sufficient in common to make analysis of their differences meaningful” (Bray 2004a, p. 248). Thus, rather than a mechanical identification of similarities and differences between two or more places, it is suggested that attention be paid to the underlying context of these commonalities and differences, and to their causal relevance to the educational phenomenon being examined. In other words, any meaningful comparative study should be able to identify the extent and the reasons for commonalities and differences between the units of comparison, examining the causes at work and the relationships between those causes. Kubow and Fossum (2003) provided a useful tool with “boxed” juxtapositions of comparisons of featured countries with respect to demographic, geophysical and socio-political factors shaping education (Figure 4.2).

In the case of comparisons which seek to understand the cause–effect relationship in two or more cases, the identification of parameters of comparability is taken a step further, emphasising their causal relevance to the educational issue being examined. Ragin (1987, pp. 45, 47–48) identified three basic steps in case-oriented research strategy:

- A search is undertaken for underlying similarities among the units for comparison displaying a common outcome;
- The similarities identified are shown to be causally relevant to the phenomenon of interest; and
- On the basis of similarities identified, a general explanation is formulated.

In some cases, the units for comparison are apparently different but the educational phenomenon in both units manifest a common outcome. As Ragin (p. 47) explained:

Investigators must allow for the possibility that characteristics which appear different (such as qualitatively different systems of incentives) have the same consequence. They are causally equivalent at a more abstract level ... but not at a directly observable level. Thus, there may be an “illusory difference” between two objects that is actually an underlying common cause when considered at a more abstract level.

Ragin also cited cases which appeared very similar, i.e. manifesting an “illusory commonality” (1987, p. 47), but which experienced different outcomes. In these situations, the comparativist should try to identify the causally significant difference that accounts for contradictory outcomes between relatively similar units. In conclusion, Ragin indicated (p. 49) that “by examining differences and similarities *in context* it is possible to determine how different combinations of conditions have the same causal significance and how similar causal factors can operate in opposite directions”.

These methodological points may find resonance in comparative studies not only of places, but also of other units of analysis discussed in this book. For the purposes of this chapter, the methodological approaches serve as a lens through which the illustrative cases of studies comparing places will be viewed and evaluated. Geographic entities offer a variety of foci for comparative inquiry in education, ranging from the macro level of world regions down to the micro level of classrooms and individuals.

The Bray and Thomas Framework for Comparative Education Analyses

The Bray and Thomas cube presented in the Introduction to this book (Figure 0.1) provides a three-dimensional approach to categorising various foci of comparative studies. The first dimension is the *geographic/locational*, within which seven levels are identified. The second dimension corresponds to *nonlocational demographic* groupings; and the third dimension comprises *aspects of education and of society*.

Scholars recognising the impact of geopolitical shifts on the field of comparative education have brought to light additional units of analysis and spaces for comparison (e.g. Watson 2001b; Cowen 2002a; Crossley & Watson 2003; Welch 2005). Aside from the cultural dimension, they have suggested focusing on political and economic dimensions relevant to education when grouping places for comparison. These varied modalities of spaces, which could be inserted across the locational dimension in the Bray and Thomas cube, include geographic classification based on colonial history, economic alliances and epistemic culture. With respect to colonial history, for example, territories in sub-Saharan Africa may be categorised as former British, French or Portuguese colonies, and offer

fertile terrain for comparison. Alternatively, regional economic blocks provide instructive units for comparison. As explained by Cowen (2002a, p. 275):

These blocks have emerged in West and Central Europe, in North America, in East and Southern Asia, and in South America. They speak to educational equivalencies, mobile professional labour, new links between universities and research and development industries, as well as new forms of hybrid identity for individuals. They may lead to the convergence of some aspects of education, such as curriculum and evaluation, in former national and separated educational systems.

Regional blocks can be incorporated in the cube fairly easily at the level of world regions. Despite these emerging social units of convergence, there is an opposite trend towards divergence manifested in the formation of social groups with a strong sense of sub-national identity, e.g. among the Bretons, Catalans and Scots (Cowen 2000a, p. 5). These likewise open up other foci for comparison. Cowen thus concluded that comparative scholars are now invited to “play chess in at least eight or nine dimensions” (2000b, p. 340).

Related to the effects of economic globalisation is the contemporary phenomenon of “knowledge diaspora” (Welch 2005), leading to the formation of new epistemic communities that cut across national and regional boundaries. A related development that poses alternative landscapes for comparative analysis is the growth of “virtual” universities and classrooms as a result of developments in information and communications technology. These virtual entities are not located in a physical place, but in “cyberspace”. While the school/classroom remains the unit of analysis (levels 5 and 6 of the cube), the virtual mode of teaching and learning introduces new elements and forces into the comparative experiment.

The above discussion has brought to light some alternative perspectives on the use of geographic entities as a unit of analysis. Scholars have identified derivative spatial units which have emerged as a result of geopolitical, economic, sociocultural and technological shifts. These include cultural groupings (by religion, language, ethnicity), political/economic clusters, and epistemic communities. These derivative units are in fact potentially contained in the original Bray and Thomas framework, and are inextricably linked to one or more locations. The following section

explores concrete examples of comparative education analyses, taking the different locational levels of the cube as foci of comparison and using both traditional and alternative spatial units of analysis.

Geographic Entities as Units of Analysis

This section focuses on the geographic/location dimension of the Bray and Thomas cube. The discussion commences with the seven geographic levels represented on the front face of the cube, from the highest level of world regions/continents to the lowest level of individuals. Illustrative examples of comparative studies are discussed with a view to identifying their implications and evaluating their methodological effectiveness in elucidating the subjects being compared.

Level 1: World Regions/Continents

Bray and Thomas (1995, p. 474) explained the nature of comparisons at the level of world regions and continents, the assumptions that underlie them, and the challenges faced by comparativists when undertaking them:

A substantial literature focuses on the nature of educational provision in different regions of the world. Typical terms identifying regions are the Balkan States, the European Community, the Caribbean, and the South Pacific. Allied macro-level work takes the continent as the unit of analysis and focuses on such locations as Africa, South America, or Asia.

A key assumption underlying most regional comparisons is that certain shared characteristics differentiate one region from another in educationally important ways. The unifying characteristics of any particular region may include language, political organization, colonial history, economic system, national ambitions, and/or cultural origins. Three particular challenges face authors of cross-regional comparisons. They must convince readers that the characteristics cited as unifying a region are truly shared by the region's members; demonstrate that two or more regions are substantially similar or different in the nature of their unifying features; and show that such similarities and differences are educationally important.

These observations serve as a guide for the discussion below. The following examples show various ways in which regions may be used as units of comparison. The first example discusses a qualitative comparison

of regional economic blocks, while the second involves a quantitative study of “constructed” world regional groupings.

This first example takes three regional economic groupings as its focus of analysis: the European Union (EU), the North American Free Trade Agreement (NAFTA) and the Asia-Pacific Economic Cooperation (APEC). Dale and Robertson (2002) analysed them as subjects of globalisation, and examined their effects on national education systems. The study crossed three continents and adopted a qualitative approach.

Supranational bodies like the EU, NAFTA and APEC are formed as a result of the deliberate decisions of national governments to grant these entities some autonomy in order to achieve certain common goals. Thus, although they share common geographic bases, albeit constructed ones, the unifying and binding force of each regional entity is the political will of its constituent members, the intensity of which could downplay the importance of intra-regional disparities. In this sense, regional organisations provide a manageable and interesting window through which regions could be viewed.

Dale and Robertson nevertheless noted that regional organisations are nested in a complex web of institutional relations, cultural and political practices, and global developments (2002, p. 18). Among the obvious differences are the size and diversity in the member states of each regional organisation. NAFTA has three members, the EU has 25 member states, and APEC has 21 member economies including several located outside the Asia-Pacific region. The authors further explained (p. 29) that: The diversity of its membership distinguishes APEC from the other two organisations. The membership covers the whole range of national wealth, from the USA to Papua New Guinea. There are distinct cultural and religious differences among the members, and many of them have education systems that continue to bear (rather different) traces of their colonial histories, so that, overall, there is a correspondingly broad diversity of educational systems and provisions.

This example is instructive in terms of its comparative method. Its approach reflects to some extent the Bereday method of juxtaposition to establish a basis for comparison. The authors described and examined the purpose and form of the three regional organisations and their impact on education, as determined by key variables such as the strength, scope, and mechanisms employed (Figure 4.3). Simultaneous comparison was done gradually. First, NAFTA was examined as a single case. The EU case that followed was then contrasted with NAFTA, and finally APEC was

compared and contrasted with the two preceding bodies. The article deserves emulation in its systematic analysis of issues following its guiding framework in Figure 4.3. However, its conclusion could have been enhanced if the authors had provided a simultaneous comparison of the three regional organisations instead of leaving it to the reader (p. 35), as had been the case:

In our accounts of the organisations we have drawn on this framework [Figure 4.3] to plot the differences between them to the point where we hope that readers will be able to fill in the cells [in the figure] as a form of summary of some of our main points that would be more effective than we could provide through simple recapitulation of them.

Figure 4.3: Mapping the Dynamics of Globalisation through Regional Organisations

<i>Variables to determine external influences on education policy and practice</i>	EU Form and purpose	NAFTA Form and purpose	APEC Form and purpose
<i>Dimensions of power (soft or hard):</i> • decisions • agenda setting • rules of the game			
<i>Nature of effect (direct or indirect) on:</i> • politics of education • education politics			
<i>Processes/means of influence:</i> • strategies • tactics • devices			
<i>Scope – the extent of influence on different levels of education – measured through:</i> • sovereignty • autonomy			

Source: Dale & Robertson (2002), p. 19.

An underlying theme in the comparison of the three organisations is that the greater the diversity among the members forming a regional grouping (in terms of economic wealth, religion and culture, colonial history and

vestiges in educational systems), the looser the coupling among them. This is evidenced by the divergent approaches adopted by APEC member states on education policy in contrast to the harmonisation approach of the EU and the rules-based approach of NAFTA. A regional study of this nature and magnitude opens the door for further research examining the contexts of the different member states/economies so as to tease out the factors that account for their divergent or convergent strategies.

The second example considers regional grouping based on geographic proximity. Geographic proximity is, after all, a traditional basis for regional groupings. Heyneman (1997) compared the quality of education in the Middle East and North Africa (MENA) region with that of other world regions. Table 4.1 reports that education in the MENA region, in contrast to others, is financed more from public sources, and even more than health within MENA. Heyneman's study is generally instructive on the issue of improving the quality of education in the MENA region. It traced a broad picture of regional patterns and priorities in educational spending. Glaring contrasts in such regional comparative analysis can alert policy makers to implement corrective action.

Table 4.1: Distribution of Health and Education Spending between Government and Non-Government Sources, by Region

	% Government		% Non-Government	
	Health	Educa- tion	Health	Educa- tion
Latin America and the Caribbean	61	53	39	47
Asia and Pacific	39	53	61	47
Sub-Saharan Africa	53	66	47	34
Market Economies	61	70	39	30
Middle East and North Africa	57	90	43	10

Source: Van der Gaag (1995), cited in Heyneman (1997), p. 464.

However, the MENA region is quite diverse. It comprises 21 countries which, though partly unified by Islam, are quite different in land area, population, economic prosperity and other dimensions. At one extreme is Algeria having 27.3 million people in 919,595 square miles, and at the other extreme is Bahrain with only half a million people in 267 square miles. In terms of economic prosperity, the United Arab Emirates had a

per capita Gross Domestic Product of US\$19,870 in contrast to Yemen's US\$540 (English 1997). Thus, without undervaluing the work of Heyneman, this example is taken to make a methodological point. Beneath the apparent homogeneity which "regions" attempt to convey are demographic differences. The wider these differences, and the more causally significant their relationship to the phenomena being examined, the more cautious should be the interpretation of results.

The above discussion highlights the value of comparisons across world regions. Through the analysis of aggregate data at a supranational level, patterns and trends can be discerned to advance conceptual understanding and contribute to policy amelioration. However, regional groupings at the supranational level are not necessarily natural or homogeneous; rather, they embrace (and overshadow) substantial intra-regional diversity.

Classifications by world regions, because of their breadth, can be subject to challenge. The use of the term "region" may itself be rather indiscriminate. Such is the case with the term "European" (Coulby & Jones 1996), "Caribbean" (Louisy 2004), "Mediterranean" (Sultana 1996), and "Latin American" (Beech 2002). These authors underscored the value-laden and constructed nature of supranational regional groupings which are formed not merely on natural, geographical grounds of proximity but also as a result of geopolitical forces. This construction of regional boundaries implies that researchers need to be aware of and sensitive to the plural identities within regions for their analyses to be balanced and meaningful. Groupings by world regions, while useful, inevitably obscure significant divergences at the lower levels. Users of comparative studies of the world-systems genre therefore need to exercise caution when interpreting the data and recommendations derived from them.

Level 2: Countries

Countries have been the dominant unit of analysis in comparative studies since the beginnings of the field (see e.g. Kandel 1933; Hans 1949; Bereday 1964), and remain very prominent (see e.g. Broadfoot 2000, p. 360).

Before proceeding to the theoretical and methodological issues regarding country-level analysis, some conceptual clarifications are needed. Studies involving cross-national comparisons exhibit some looseness in the use of the term "country" as synonymous to "nation". It is thus worth pausing to clarify some terms. Getis et al. (2002, pp. 314–315) made the following distinctions between states, countries, nations, and nation-states:

A **state** is an independent political unit occupying a defined, permanently populated territory and having full sovereign control over its internal and foreign affairs. A **country** is a synonym for the territorial and political “state”. A **nation** is a group of people with a common culture and territory, bound together by a strong sense of unity arising from shared beliefs and customs. A **nation-state** properly refers to a state whose territorial extent coincides with that occupied by a distinct nation or people.

This discussion will endeavour to make precise use of these terms.

The first set of examples illustrates Ragin’s concept of illusory commonality discussed earlier. The term refers to cases which appear very similar but which experience different outcomes, which are in turn traced back to causally significant differences amidst apparent “illusory” commonalities. The first example involves four relatively similar Asian states.

Morris (1996) examined the relationship between education and development in the four “Asian Tigers”, namely Hong Kong, Taiwan, South Korea and Singapore. He established the hypothesis for comparability in a Bereday-type way. While citing commonalities among the four states in terms of rapid levels of economic development and high literacy rates (Table 4.2), he noted causally significant differences that had shaped the educational phenomena examined (p. 96):

These similarities mask a number of critical differences. Hong Kong is still a British colony and Singapore was one until 1961 [sic]. This has been an important influence in a number of ways. Singapore is also distinctive in that its population is multiethnic in origin. In contrast Hong Kong, South Korea and Taiwan are ethnically very homogenous. Whilst Singapore and Hong Kong are essentially city states with no hinterland, South Korea and Taiwan have significant rural areas and agricultural sectors.

Morris noted dissimilarities in the role of the state in supporting economic growth and in educational provision and planning. He then proceeded to a simultaneous comparison of the four societies across five dimensions of formal education (primary, secondary, tertiary and vocational/technical education, and the school curricula). He concluded (p. 96) that there is

Table 4.2: Key Indicators of Selected Asian Economies

	Population 1991 (millions)	Population growth rate 1980–1991 (%)	GDP per head 1993 (US\$)	GNP real growth rate 1980–1991 (%)	Literacy rate 1990 (%)	Public expenditure on education as a % of GNP, 1991
Hong Kong	6	1.4	16,382	6.9	90	3.0
Singapore	3	2.1	15,200	7.1	88	3.4
Taiwan	20	1.9	10,215	7.9	90	5.4
South Korea	43	1.1	6,635	10.0	96	3.6
China	1,150	1.5	360	9.4	73	2.3
Japan	123	0.5	27,326	4.3	99	5.8
Malaysia	18	2.6	2,965	5.6	78	6.9
Macau	0.5	3.5	11,300	n.a.	61	0.7
India	865	2.1	310	5.5	48	3.5
Philippines	61	2.4	835	1.2	90	2.9

Note: Although the term “economy” was used in the title of the table, the unit of description was the state/country.

Source: Morris (1996), p. 97.

a substantial degree of variation across the societies examined in terms of the source of funding for educational purposes, the responsiveness of the state in providing education, in particular tertiary education, the extent of state control, the relative emphasis on general and technical education and the nature and role of the school curriculum. Two critical differences which emerged were the strong reliance of Taiwan and South Korea on manpower planning in the period after initial industrialisation, with a consequent focus on technical and vocational education and, in contrast, the greater reliance in Singapore and Hong Kong on market signals and, consequently, on more academic curricula. This was a reflection of the very different levels of state intervention in all aspects of schooling despite the existence of “strong states” in all four societies.

Noteworthy is the study’s systematic recognition of contextual similarities and differences, and of the relationship of those contextual factors to the different educational phenomena observed.

Another study of similar structure is Hoppers' (1998) comparison of Teachers' Resource Centres (TRCs) in Mozambique, Zambia and Zimbabwe. Hoppers demonstrated that the TRCs' fate was closely associated with changing policies and philosophies on school development and on the roles of teachers in the three states. These relationships were analysed within the wider socio-political context of the Southern African sub-region. The three countries were evaluated separately – couching the TRC phenomena in their respective environments – and subsequently juxtaposed for simultaneous comparison. The study concluded (p. 245):

In spite of common characteristics, Teachers' Resource Centres are not a uniform concept that means the same in every education situation. Nor are they neutral facilities that can be planned and developed separately from an understanding of the wider system, its policies, practices, and interactions, within which they are meant to function These variations have been found to be linked not only with different national policies, but beyond these with different political orientations and diverging views on the role of teachers and the nature of teacher support structures.

The similar studies by Morris (1996) and Hoppers (1998) illustrated a methodological point on the careful selection of units that exhibit "illusory commonality", identifying a shared foundation to make meaningful sense of the resultant differences in the educational phenomena being compared. The next example will explore a case of "illusory difference", which refers to comparisons which take two or more units that are apparently different but arrive at a similar outcome. An example is the work of Canen (1995).

Canen focused on Brazil and the UK, and analysed parallels in the role of teachers' perceptions in the selectivity of education systems. She argued that despite the huge contextual differences between the two places, both faced similar challenges imposed by the multicultural nature of their societies. In this vein, she identified "multicultural diversity" as the *significant* contextual similarity, amidst the wide differences distinguishing the two countries, which led to a similar resultant feature in both education systems. She concluded (p. 235):

Although different in their composition, Brazilian and UK societies are presented with the selectivity of educational systems against specific groups of the population, in which teachers' perceptions and expectations play an important role. In the Brazilian case, the

failure of less socially and economically advantaged children through repeating has led some authors to identify at least two sorts of culture in the scope of the school (popular and dominant), stressing the need to prepare teachers to build on pupils' culture to attain effective teaching. In UK, the need for multicultural education both for white and ethnic minority children was stressed, so as to discourage prejudice and racism and to achieve effective equality of opportunity.

Canen could perhaps have recognised more strongly the extent of the dissimilarities between Brazil and UK. Also, substantial intranational diversity exists at the level of sub-regions and states in each country, as evidenced by statistics on demography, racial mix and education. Thus, it might perhaps have been more illuminating to examine the selectivity of the education systems at the lower levels of regions. Brazil has been traditionally divided into five major regions: the Northeast, North, Southeast, South, and Central-West; and in the UK, educational practices are significantly different in England, Wales, Scotland and Northern Ireland. Nevertheless, Canen's article is an instructive example of the value of comparing educational phenomena in apparently dissimilar contexts.

The third example concerns large-scale cross-national comparisons. International comparisons involving a large sample of countries have commonly been undertaken to analyse educational achievement, educational spending and other aspects. Such studies may involve both quantitative and qualitative study. For example, Ferrer et al. (2004) studied patterns of convergence in lower secondary education in 15 EU countries. The work explicitly compared various dimensions of secondary education across the 15 countries: educational administration, curriculum and teacher education.

Within the larger project coordinated by Ferrer et al., Valle and Hernández focused on curriculum. Table 4.3 reproduces data on the distribution of school hours allocated to compulsory and optional subjects. Among the eight countries that allocated time to electives, only Holland exhibited a high percentage (22%). Belgium (Francophone), Spain, Finland, and Portugal were within the range of 10 to 15 per cent, and the rest were below 10 per cent. While these international comparisons are helpful to discern patterns of convergence, the authors acknowledged the complexities of obtaining systematically comparable and equivalent data,

owing to cross-national diversity within the EU and further diversity at the sub-national and school levels (p. 69).

Some of these methodological points were in fact highlighted in an earlier chapter of the cited book. In the first place, the structure of lower secondary education differs substantially across the 15 EU countries, with a duration ranging from three to six years, and the typical age of schooling ranging from 10 to 13. Moreover, some countries make a clear institutional distinction between primary and secondary schools (mainly in the Nordic countries and Portugal), while others offer a “through-train” between lower and upper secondary education (Austria, Germany, Ireland and the UK), and the rest completely separate the primary, lower secondary, and senior secondary schooling (Naya 2004, pp. 45–46).

To the above may be added a further methodological point making reference to the entry Belgium “Francophone” and UK “England”, respectively. Understandably, the table cited above must have been prepared based on available data. Readers should however note that the

Table 4.3: School Time Allocated to Compulsory and Optional Subjects, for European Union Students Aged 12–14 (2001)

	% of time on compulsory subjects	% of time on optional subjects
Austria	100	0
Belgium (Francophone)	85	15
Denmark	100	0
Finland	86	14
France	93	7
Germany	97	3
Greece	100	0
Holland	78	22
Ireland	100	0
Italy	100	0
Luxembourg	–	–
Portugal	90	10
Spain	87	13
Sweden	94	6
UK (England)	100	0

Source: Extracted from Valle & Hernández (2004), p. 70.

French community of Belgium is neither a country nor a nation-state.² Likewise, England is arguably not a country but a sub-national region of the UK. These underlying differences are obscured in summary tables which allocate equal space to each “country”. This practice gives the misleading notion that the countries are equivalent or homogeneous units.

The example given here has highlighted some of the complexities involved in large-scale international comparisons. It also underscored the fact that substantial differences exist among countries from the same European region. Further challenges are therefore to be expected when comparing a larger sample of countries from different regional contexts. As Bray and Thomas observed (1995, p. 478), large-scale international comparisons “gloss over the facts that national boundaries are entirely arbitrary, and that the forces of geography, history, and politics happen to have created units of greatly differing size and content”. Thus, without undervaluing the contribution of large-scale international comparisons to a conceptual understanding of educational patterns in various countries, producers and consumers of these studies need to exercise caution in their reporting and interpretation.

Comparisons taking the country as a unit of analysis are prominent in the field of comparative education. This is a legitimate practice considering that each country has a government which is the ultimate political unit exercising sovereignty over its internal and foreign affairs, and countries are thus the traditionally recognised entities of international governance. Moreover, in many countries control of important aspects of education is centralised and shapes national education systems. Thus, data on education are often available on a national aggregate basis. Country comparisons, like world-systems comparisons, are thus useful in providing a general framework for understanding and interpretation of relationships between education and society.

However, the use of the country or nation-state as the dominant research framework has been continually challenged (e.g. Kelly & Altbach 1988; Clayton 2004; Mitter 2004). Scholars cite world systems analysis and intranational regional variations as major issues that make the use of the nation-state an inadequate unit of analysis. The main arguments are that

² A three-level state structure was created in Belgium in 1993. At the top were the Federal State, the Communities and the Regions, all three of which were equal from the legal viewpoint. There were three communities and three regions: the French, Flemish and German-speaking Communities, and the Flemish Region, the Brussels-Capital Region and the Walloon Region.

national school systems exist within the context of unequal power relations among nations (Kelly & Altbach 1988, p. 14), and that regional variations in education within nation-states are often as great if not greater than those between nation-states, thereby making intranational comparisons as significant as international comparisons. To illustrate the methodological complexities involved in the use of countries, Postlethwaite (1994, p. 1767) cited several countries having decentralised political systems:

For example, Canada is a country but it consists of 10 provinces and 2 federal territories. Each province is responsible for its own educational system. The same is true for Australia with its 6 states and 2 territories, and for Germany with its 16 separate states, where education is the legal responsibility of each state. Belgium has 2, and the United Kingdom has 3, separate systems. The United States has 50 separate systems. Each of the 26 cantons in Switzerland is responsible for education within its own canton.

In these cases, intranational comparisons may yield more meaningful results than would aggregate international studies. The examples above have shown that cross-national comparisons tend implicitly to assume that countries are homogeneous, equivalent units of analysis. This, as the literature indicates (e.g. Walberg & Zhang 1998; Robinson 1999; Gorard 2001), can lead to misleading conclusions if data are not interpreted with caution and balance.

Level 3: States/Provinces

The third level of locational comparison is the intranational level of the state or province. Among the factors that make the state/province an appropriate unit of analysis is the high degree of decentralisation in many countries. Strongly decentralised systems exist in both geographically large countries such as Australia, Canada, India and the USA, and in small ones such as Switzerland. At this level, alternative units would also include Special Administrative Regions (SARs), such as Hong Kong and Macao which operate with strong autonomy within the People's Republic of China (Bray & Koo 2004).

Taking the state/province as a unit of description is also recommended when significant regional disparities exist within a country. In these cases, intranational comparisons yield more meaningful interpretations than aggregate, cross-national ones. Corollary to this, sub-national

units may be compared within the same country or between countries or even regions.

The following examples illustrate some of these approaches. They elucidate the strengths of state-level comparisons while also pointing out some weaknesses as compared to lower-level studies.

Goldschmidt and Eyermann (1999) provided an interesting example of a quantitative intranational study focusing on US performance on international reading and mathematics achievement tests. The authors presented disaggregated measures to identify relationships between expenditures and outcomes across US states. For educational expenditures, they used the ratio of current public expenditure per pupil relative to the country's Gross Domestic Product (GDP) or the Gross State Product (GSP), its equivalent measure for the state. For student outcomes, the authors used the National Assessment of Educational Progress (NAEP) scores for Grade 8 mathematics in 41 states. They then compared the statistical data of the USA as a whole with 11 other countries, using the 1991 International Assessment of Educational Progress (IAEP) scores for Grade 8 mathematics. Since this analysis did not reveal meaningful results, they finally plotted the 41 US states individually against these 11 countries (Table 4.4).

This innovative approach revealed some interesting results, as commented by the authors (pp. 37–38):

Some states do relatively well, while other states do relatively poorly, based on an international comparison. That is to say that North Dakota, Iowa, Maine, Nebraska, and Wisconsin, are doing as well as Hungary, Switzerland, and Italy. All of these states and nations seem to be “getting what they pay for”. States such as Alabama, Louisiana, and Mississippi seem to be in the same situation as Jordan. These states seem to lack the investment intensity necessary to generate good test scores.

Of more concern are states such as Florida, West Virginia, and Arkansas, that are spending a great deal on education, given their per capita income, yet are receiving few positive results, in terms of national assessment test score. At the other end of the spectrum, however, Minnesota, New Hampshire, Idaho and Utah, have systems in place that approach the efficiency of top performer Korea.

The authors concluded that this type of analysis provided the USA with models of the best and most cost-efficient educational systems within its national boundaries, which were much easier to emulate than foreign models taken from Korea or Switzerland, for example. This did not, however, suggest that the USA or its respective states should be precluded from looking at places and systems outside its national boundaries.

Table 4.4: Comparison of Nations and US States on Percentage Deviation from Expected 1990 Grade 8 Mathematics Scores and Expenditures on Education per Capita

	Percentage deviation			Percentage deviation	
	NAEP*	Expenditure		NAEP*	Expenditure
Korea, Republic	6.7	-25.4	North Dakota	5.8	17.7
Minnesota	5.0	-1.8	Iowa	5.7	10.8
New Hampshire	3.5	-13.8	Hungary	5.1	21.5
Idaho	2.8	-6.8	Switzerland	4.1	32.1
Utah	2.7	-20.9	Maine	3.8	12.7
Israel	2.5	-13.4	Nebraska	3.5	2.5
France	2.4	-14.1	Wisconsin	3.5	8.7
Connecticut	1.2	-6.1	Italy	2.2	8.1
Massachusetts	1.1	-10.2	Wyoming	1.9	3.2
Missouri	1.0	-11.7	Ireland	1.7	3.2
			Colorado	1.6	2.6
			Pennsylvania	1.4	14.5
			Canada	1.1	6.1
			Indiana	0.7	2.8
			New Jersey	0.6	0.9
			Oklahoma	0.2	4.0
Ohio	-0.2	-2.2	Michigan	-0.2	11.5
Virginia	-0.5	-10.5	Rhode Island	-0.9	23.5
Spain	-0.7	-27.6	New York	-1.1	7.3
Arizona	-0.9	-0.5	Texas	-1.2	3.2
Kentucky	-2.3	-17.9	Maryland	-1.5	5.8
Delaware	-2.4	-12.9	South Carolina	-2.5	8.0
Georgia	-3.3	-15.1	New Mexico	-3.0	4.5
California	-3.3	-26.1	Florida	-3.1	11.8
Tennessee	-3.6	-15.3	West Virginia	-3.2	23.1
North Carolina	-3.7	-7.7	Portugal	-3.4	19.8
Hawaii	-4.4	-40.9	Arkansas	-4.4	6.1
Alabama	-6.2	-6.8			
Jordan	-6.6	-99.5			
Louisiana	-7.3	-31.3			
Mississippi	-8.2	-4.5			

Note: * For foreign nations 1991 IAEP scores are linked to the 1990 NAEP scores.

Source: Extracted from Goldschmidt & Eyermann (1999), p. 40.

While the above analysis is creative and insightful, it deserves some comment from a methodological perspective. Several difficulties arising from international and intranational differences may be noted. As the authors recognised (p. 40), intra- and cross-regional disparities exist among their units of analysis:

Depending on the state or country, there may be significant variations in economic wealth within a region of the country and significant differences in educational achievement within social and culture regions.

The first relates to the equivalence in economic purchasing power used in computing “expenditure on education per capita”. The second relates to the comparability of test scores given that they pertain to students who may belong to different age groups as determined by different education systems. This section refrains from discussing these two issues since they will be taken up in a later chapter. Instead, it focuses on a third methodological point. The example, while elucidating the value of intranational comparison in view of the highly decentralised system of the USA, overlooked the similarly decentralised structure of some of the countries it included in the league table for comparative purposes. The use of Canada and Switzerland, for example, as places for comparison with states within the USA (e.g. North Dakota and Iowa) glossed over significant sub-national differences in those two countries which are as highly decentralised as the USA. It might have been more meaningful in this case to compare Ontario or British Columbia and/or the various Swiss cantons with the respective constituent states of the USA.

Hega (2001) analysed educational policy making in the 26 cantons (states) of Switzerland. Cantonal governments have autonomy in educational matters such as curriculum structure and content, length of the school year, and medium of instruction (German, French, Italian or Romansh). Such a highly decentralised system, characterised by cultural and linguistic diversity (Table 4.5), is a classic case for intranational comparison.

Hega gave an insightful analysis of the politics governing second language instruction policy across the cantonal demarcations. She highlighted the distinctive educational cultures that had emerged in Switzerland as a result of the interaction between cultural traditions, linguistic heritage and religious beliefs in each canton. This “specific local or regional education culture is reflected, for instance, in the subjects, methods

Table 4.5: Demographic and Sociocultural Characteristics of the Swiss Cantons

Canton	Population in 1990	German- speakers (%)	French- speakers (%)	Italian- speakers (%)	Romansh- speakers (%)
Zürich	1,179,044	82.9	1.7	8.0	0.5
Bern	958,192	84.4	8.2	4.0	0.1
Luzern	326,268	90.9	0.7	3.9	0.2
Uri	34,208	93.3	0.3	3.3	0.3
Schwyz	111,964	91.0	0.4	4.8	0.3
Obwalden	29,025	94.0	0.5	2.1	0.1
Nidwalden	33,044	93.6	0.6	2.5	0.2
Glarus	38,508	83.3	0.4	10.0	0.4
Zug	85,566	86.8	1.2	5.3	0.4
Fribourg	213,571	32.3	61.4	2.6	0.1
Solothurn	231,746	87.0	1.5	6.8	0.2
Basel-City	199,411	80.7	3.4	8.0	0.3
Basel-Land	233,488	85.1	2.4	6.8	0.2
Schaffhausen	72,160	85.3	0.7	6.2	0.2
Appenzell-Ausser rhoden	52,229	89.6	0.4	4.6	0.2
Appenzell-Innerrhoden	13,870	92.9	0.1	2.8	0.1
St. Gallen	427,501	88.5	0.4	5.2	0.5
Graubünden	173,890	59.9	0.6	13.5	21.9
Aargau	507,508	85.6	1.0	7.4	0.2
Thurgau	209,362	86.7	0.5	7.1	0.3
Ticino	282,181	11.1	1.9	83.9	0.2
Vaud	601,816	8.6	75.1	7.4	0.1
Valais	249,817	32.1	60.0	4.8	0.1
Neuchâtel	163,985	8.0	77.1	8.8	0.1
Geneva	379,190	9.5	64.7	9.4	0.1
Jura	66,163	6.3	85.9	4.4	0.0
Switzerland	6,873,707	63.6	19.2	7.6	0.6

*Bundesamt für Statistik (1994) *Statistisches Jahrbuch der Schweiz 1994* (Bern, BfS).

Source: Extracted from Hega (2001), p. 208.

and types of instruction; the organisation of educational institutions and their governance; and the teaching personnel that is trained according to specific methods and develops certain attitudes and techniques" (p. 223).

From a methodological viewpoint, this example illustrates the internal complexities and interactions that take place in highly decentralised systems of government which are also culturally diverse. Sub-national comparisons thus bring into relief the finer yet significant details of educational mosaics which would otherwise not have been captured in generalist country studies and which could have led to reductionist and simplistic interpretations.

As in comparisons at the higher levels, macro-level comparison obscures disparities at the micro levels. A final example is provided of an international comparison made taking a pair of sub-national regions.

Fry and Kempner (1996) focused on Northeast Brazil and Northeast Thailand, two provincial regions in two different hemispheres. The authors started by comparing the sub-national regions of Brazil, highlighting the regional disparities and identifying Northeast Brazil as the poorest region in the country. This was followed by a multidisciplinary analysis of Northeast Brazil in terms of its geographic and economic conditions, cultures, migration patterns, religions and educational philosophies. A similar exercise was undertaken for Thailand, revealing similar patterns of neglect and underdevelopment in the Northeast region. Finally, a simultaneous comparison of the two north-eastern hinterlands of Brazil and Thailand was made on the basis of their similar economically disadvantaged status as compared to the rest of their respective countries. The analysis revealed (p. 357) that

the neglect of a region and its people may be endemic to the sub-national imperialism or internal colonialism of a country Often the most industrialized [region in a country] may exploit the resources and human capital of the less developed region [in its own country]. A critical example of this is Brazil's massive foreign debt. The money borrowed from the International Monetary Fund principally serves the interests of the industrialized South to the detriment and continued neglect of the underdeveloped Northeast and rural areas.

As the authors argued, an overall economic and educational study of Brazil and Thailand might overestimate the aggregate economic performance of each country while overshadowing the "other Brazil" and the "other Thailand" (p. 335). This example of a cross-cultural comparison of two sub-national regions sharing similar dilemmas has drawn out instructive lessons that would otherwise have passed unnoticed in aggregate cross-national comparisons or in inter-regional comparisons within the same country. In this light, the observation that comparative studies can make "familiar patterns strange and strange patterns familiar" (Bray 2004a, p. 250) aptly describes the lessons from this example.

The three examples in this section have shown that sub-national comparisons offer rich and deep vistas for understanding educational phenomena which would have been overshadowed at the higher locational

levels. While the first example attempted to make a meaningful comparison of the 41 states of a large country with foreign countries, the second example took the small country of Switzerland to examine its mosaic of 26 cantons. The last example showed an alternative approach by taking two similar sub-national regions from two different countries in two different hemispheres as a pair for comparison.

Level 4: Districts

Before discussing some examples of district-level analysis, it would help to unpack the term “district”. According to the Collins Dictionary (1995, p. 482), a district is an area of a town or country which has been given official boundaries for administrative purposes. It encompasses places which are below the provincial/state level but are above the school/institutional level. It includes such urban units as towns and cities, as well as rural units of counties and villages.

District-level comparisons are particularly useful when there is significant intra-provincial variation or when aggregate national and/or provincial statistics are not reliable or are misleading due to significant variations across districts and/or technical difficulties in collecting data at higher levels (Bray and Thomas, 1995, pp. 480–481). These points will be illustrated in the following examples, which take the city, the village and the sub-district as units of analysis.

Cities, although not explicitly mentioned on the face of the Bray and Thomas cube, may be compared either within the same country or across more than one country. The study cited below takes a pair of cities in China.

Lo (2004) focused on junior secondary history curricula in Hong Kong and Shanghai. The two cities shared features as robust financial centres vying for a share of China’s economic market. Shanghai, in contrast to other cities in China, was fast developing as a cosmopolitan city and an attractive home for foreign investment. In this respect, it was more similar to Hong Kong than to other Chinese cities. Nevertheless, Hong Kong and Shanghai differed in their political systems: Hong Kong officially had a capitalist system while Shanghai officially had a socialist one. Recent political changes, however, had created convergence between them. After its decolonisation by the British and return to the Motherland in 1997, Hong Kong’s history curriculum had increasingly emphasised national (Chinese) identity. Conversely, China’s modernisation drive had boosted global awareness which had impacted on the history curriculum

reforms in Shanghai. From this perspective, the two cities served as an illuminating pair for analysing the evolutionary path of their respective history curricula.

From a methodological perspective, a subtle distinction may be made here. Shanghai is clearly a city of China, while Hong Kong is a rather different political entity: it is a Special Administrative Region which operates differently from other cities in China, including Shanghai, despite similarities in economic liberalisation. This is an important factor to consider when analysing the reasons for curricular policy convergence and divergence.

The second example focused on the village as a unit of comparison. Puchner (2003) studied four villages in a district in southern Mali, examining the ways in which existing power relations shaped women's literacy. The ethnographic study was premised on the following (pp. 440–441):

In women's literacy it is especially important to keep in mind that the politics and power structures that characterize the community mediate and in fact dictate the influences that literacy has on the community in general and on women in the community in particular.

Through an in-depth comparison of the practices in the four communities, the study captured the subtle power relations across the villages and made a case for the central policy makers to take into account the significant factors that determined women's power and position in the community before implementing any structural adjustments to improve literacy (p. 457). From a methodological viewpoint, comparative ethnographic studies at this microscopic level are valuable to tease out important elements which shape educational phenomena. However, it would have been desirable to see in this study a reference to the socio-political context at the supra-village level, e.g. in the province and country, as well as to the role of culture and religion.

A related case for this category is Dyer's (1996) ethnographic research on the policy innovation in elementary education in India, taking three areas in Baroda district, Gujarat State of India as case study sites. Three groupings of primary schools were selected to reflect a variety of socio-economic settings in that location, mirroring the wider context of India: a tribal area of Chhota Udepur, a rural area of Karjan, and an urban setting of Baroda city. The study demonstrated intra-district diversity within the same state and its implications (p. 38):

Central policy-makers need to recognise the existence of a wide variety of very different educational contexts. As this paper has illustrated even a single District of one State cannot be treated as a homogeneous unit. The implications of heterogeneity for the educational process must be considered in the formulation of any educational innovation in a country of such diversity as India.

The examples given above have elucidated the usefulness of district-level analysis in uncovering vital dimensions which are causally important in shaping society–education relationships and which are normally obscured in macro-level, aggregate studies. A range of units of analysis may be examined taking a city/town on one end of the spectrum, to villages and sub-districts on the other end. Studies at this level reveal meaningful lessons which complement and complete the picture captured in analyses at the upper levels.

Level 5: Schools

When schools are taken as the unit of analysis, the nature of foci changes. As Bray and Thomas noted (1995, p. 481), analysis of the higher levels of world regions, countries, provinces and districts may be concerned with the people who are *not* enrolled in schools as well as with those who are. Research that takes schools as the unit of analysis, by contrast, would focus on the specific communities comprising the schools. Moreover, adoption of the school as the unit of analysis requires a focus on institutional culture, which is rather different from the cultures underlying larger units. The authors added (p. 482) that:

One feature of this level of research is that it can present personalized portraits ... bring[ing] into focus the impact of individual differences among the “ordinary” actors. Another important factor is that schools are sufficiently numerous to permit meaningful random sampling, which would not normally be possible at the world-region, national, or provincial levels, though it could in some contexts be appropriate at the district level.

Most comparative studies taking schools as the unit of analysis focus on entities within the same country, province or district, although cross-national studies have also been undertaken (e.g. Currie 1998; Vidovich 2004; Hickling-Hudson & Ahlquist 2004). In fact, cross-national comparisons of schools may actually be undertaken within the same state. Bray and Yamato (2003) demonstrated that international schools within the small

territory of Hong Kong represented diverse foreign national systems of education. Two illustrative cases are discussed below.

Benavot and Resh (2001) undertook a comparative study of the implemented curriculum in the Jewish-secular junior high schools of Israel. With a stratified, nationally representative sample of 104 schools, their study demonstrated that despite a relatively centralised educational system, there was significant interschool diversity in the implementation of national curricular guidelines. This qualitative study is further evidence of the instructive value of analysis at the lower levels as it leads to questioning the taken-for-granted assumption that centralised means homogeneous.

Vidovich (2004) studied two schools in Singapore and Australia which had been internationalising their curricula. The Singapore school was an “independent”, non-religious school, enjoying greater autonomy than government schools but still coming under the control of the Ministry of Education (MoE). By contrast, the Australian school was a mainline Protestant school that had remained “independent” of the government sector over its long history.

The cross-case analysis of the two schools revealed similarities and differences in the external factors influencing curriculum policy development. While global forces had shaped the internationalisation of both schools’ curricula, Singapore was more sensitive to economic globalisation than Australia. Likewise, on the level of national influences, while both schools were labelled “independent”, the Singapore school identified the MoE as most influential while the Australian school considered itself a superior educational institution in the state, setting it apart from the rest (p. 449).

These divergent results point to deeper contextual differences which significantly influenced school curricular politics. While it is valuable for heuristic purposes to take a pair of schools in two very different places, caution needs to be exercised in determining which of the inherent macro-contextual factors in each place are essential and causally significant to school-level processes. The country’s size, political history and culture are significant factors that shape educational politics in Singapore and give different meaning and colour to its concept of an “independent” school. Given its small size and a history characterised by a determined national effort to establish economic competitiveness and social cohesion among its multicultural groups, Singapore’s educational policies would understandably be under the strong control of the MoE, despite claims

and indications of decentralisation. By contrast, Australia's huge territory and tradition of decentralised governance casts its concept of "independent" schools differently from that of Singapore.

The above examples thus illustrate the usefulness of examining smaller units of analysis such as the school. Such research enriches and deepens conceptual understanding of educational reality. The first example, a nation-wide comparison of schools within a centralised education system, revealed that centralisation admits diversity and pluralism. The second example, a comparison of a pair of schools from two very different national contexts, highlighted the need to identify significant contextual differences between the units compared, and examined their relationships with the resulting educational outcomes at the school level.

Level 6: Classrooms

Classrooms as the unit of analysis have not been prominent in the traditional comparative education literature, which has concentrated on the higher levels of educational systems and policies. Alexander (1999, p. 109) observed that the increasing importance given to classrooms was due to the following factors:

The growing prominence being given to "process" variables in input-output studies of the kind conducted for OECD [Organisation for Economic Co-operation & Development]; the rise of school effectiveness research and the extension of its focus from the levels of the system and the school down to that of the classroom; the attempts of educational statisticians, in their turn, to encompass the totality of the educational enterprise, including teaching, in multi-level modelling; the belated discovery by policy-makers caught up in the international league table game that what happens in classrooms is actually rather important; and the equally belated development of pedagogy as a central focus for educational research.

Classrooms offer an interesting space for comparative analyses. They also lend themselves to challenging new domains for investigation such as the emergence of a new space: the virtual classroom. The example below focuses on lessons, a derivative spatial unit related to the classroom.

Anderson-Levitt (2004) compared Grade 1 and 2 reading lessons in three countries: France, Guinea and the USA (Figure 4.4). France and Guinea were chosen on account of their former colonial relationship; the USA was placed as a third case for contrastive purposes to the other two

cases, and also because it was competing with France to influence reading instruction in Guinea.

Figure 4.4: Comparison of Lesson Structures

France holistic-analytic	France mainstream	Guinea	US traditional	US process and whole language
Group discovery or production of a text (comprehension)	Group production of a text (comprehension)	Proposal of a text (comprehension)	Vocabulary preparation (comprehension)	
Whole class reading	Whole class reading	Whole class reading	Small group reading	Small group reading
				Individual reading
Word study	Word study	Word study	Comprehension questions (comprehension)	Individual production of texts (comprehension)
				Teacher reads to or with class (comprehension)
Isolation of the sound (code: analysis)	Isolation of the sound (code: analysis)	Isolation of the sound (code: analysis)	Phonics instruction (code: analysis)	Phonics instruction (code: analysis)
Exercises	Exercises	Exercises	Worksheet, Seatwork	Seatwork, centres
	Dictation (code: synthesis)			

Source: Extracted from Anderson-Levitt (2004), p. 246.

Anderson-Levitt made a methodological point on the use of the lesson as a unit of analysis (pp. 233–234):

My analysis uses the “lesson” as the unit of comparison, but the meaning of lesson is itself problematic. In the English-language research literature, “lesson” usually refers to a single, continuous session of teaching and learning. However, as we shall see, educators in France and in Guinea define a lesson as a series of sessions that take place over the course of 2 or more days, using the same material and organized around the same goals.... The notion of a lesson is especially complex in U.S. classrooms, where the use of small groups and individual projects means that a language arts session can consist of multiple simultaneous activities.

The study, though starting from a microscopic focus on the lesson, exemplified a multilevel approach to comparison. Its conclusions transcended the four walls of the classroom and teased out similarities and differences across the Guinean, French and US reading lessons.

Level 7: Individuals

Finally, at the lowest level of the Bray and Thomas framework is the individual as a unit of analysis. As the authors explained (p. 483):

Research may also focus on individuals: principals, teachers, parents, pupils, and others. Such studies may have many disciplinary orientations, but are more likely than analyses at other levels to emphasize psychology.

Among the cases they cited are “personalised reports” focusing for example on students’ approaches to learning, or teachers’ organisation of lessons, as well as impersonal large-scale surveys of teachers, pupils or other individuals conducted by governments and other bodies. While most comparative studies of individuals are on a single level, the example below presents a multilevel approach to the comparative study of pupils.

An example of an effort to transcend the individual level and recognise the influence of higher level factors is the research project Quality in Educational Systems Trans-nationally (QUEST) which examined the influence of national culture on pupil attitudes, classroom practice and learning outcomes in England and France (Broadfoot 1999b, p. 241). The study was conducted on a sample of 800 children aged 9–11 (400 in each country) selected from four schools in each of two contrasting regions in each country (16 schools in total, 8 in each country). The study team observed (p. 251) that:

The potential significance for educational outcomes of national cultural differences is well illustrated in this example in the relatively limited spread of scores in France compared to that of the matched sample of English pupils. The indications are that the French tradition of teaching an undifferentiated lesson in which virtually all pupils are expected to be successful results in most pupils indeed being able to master what has been taught. By contrast, the English differentiated approach gives some pupils the possibility of achieving a much more sophisticated level of mastery whilst others are left far behind.

The authors then complemented this investigation with ethnographic “personalised” reports from the students and noted that English students were more individualistic and freer to express themselves. French students restricted themselves to performing the task required and seemed reluctant to make their personal statements. Finally, the authors concluded (p. 254):

Differences in what two populations of pupils are able to do reflect teachers’ different, culturally-based, expectations about children’s achievements as well as their different views of the goals of education. These culturally-based differences in teachers’ perspectives are further reinforced by similarly culturally-informed differences in the thinking that informs policy-making itself.

This study exemplifies multilevel analysis, relating the findings at the lower level of the student and classroom to the higher level of cross-cultural differences and teaching traditions. It echoes a principle in psychology which conceives the developing person as situated in a nest of ecological environments, “each inside the other like a set of Russian dolls” (Bronfenbrenner 1979, p. 3), the relationships of which needed to be analysed for a holistic interpretation of reality. It is also a model of a combined use of qualitative and quantitative research approaches. While studies of this scale require substantial human and financial resources, they contribute substantially to understanding of educational phenomena.

Comparison across Levels

After the above discussion of the seven levels of geographic units for comparison displayed on the front of the Bray and Thomas cube, this section comments on the value of multilevel comparative analysis.

Bray and Thomas (1995, p. 484) noted that:

Various studies use a multilevel design in order to achieve more complete and balanced understandings. While many such studies suffer flaws of various kinds, the fact that they consider their subjects from several different angles facilitates more comprehensive and possibly more accurate presentation of the phenomena they address.

The dominant form of research under the specific label of multilevel analysis has been principally confined to the individual, classroom, and school levels. Such studies have generally omitted

careful consideration of the state/province, country, and world-region levels, with the result that interpretations have still been arguably unbalanced and incomplete, albeit more informative than before.

Comparative scholars welcomed this appeal to multilevel comparative education analyses, and an increasing number of such studies can be found in the literature (e.g. Hickling-Hudson 2004; McNess 2004; Shabaya & Konadu-Agyemang 2004). As Alexander (2001, p. 511) explained, multilevel comparisons are crucial for a balanced and holistic understanding of educational phenomena:

[P]edagogy does not begin and end in the classroom. It can be comprehended only once one locates practice within the concentric circles of local and national, and of classroom, school, system and state, and only if one steers constantly back and forth between these, exploring the way that what teachers and students do in classrooms both reflects and enacts the values of the wider society.

This “steering back and forth” across the national, provincial, district, school, classroom and individual levels as well as across national and regional boundaries, enables the researcher to tease out “*spatial* continuities ... differentiating the universal in pedagogy from the culturally specific” (Alexander 2001, p. 519). A final illustration of the process of multilevel analysis is taken from McNess (2004).

McNess investigated teachers’ work in England and Denmark, employing an extended case study approach which linked macro-level international and national policy contexts with meso-level school and individual case studies. She used the concept of an “iterative filter” (2004, p. 318) to describe the process of multilevel analysis as

a process of constant progressive focussing, in which information was filtered through its global and national context in order to illuminate local priorities and individual classroom practice. This recognises Bronfenbrenner’s concept of the “ecological environment” ... (1979, p. 3), the relationships of which needed to be explored in order to fully understand the whole. Thus, the analysis moved from the macro policy level to the micro level of personal meaning, through the intermediary mesosystem of the school and classroom structures, while taking account of the ecosystem of the school within its local and regional community. This iteration was

not a one-way process but formed part of a recursive loop, so that the data collected at each of these levels both informed and reshaped the research questions and the research findings. This reciprocal movement between the micro and the macro was used to construct and refine meaning, as well as to check the validity of the data as it was collected.

This iterative process across the macro, meso, and micro levels of societal units and their activity thus illuminated, in this particular case, the contextualised meaning of the “quality of education”. The study elucidated that “quality” was neither universal nor static but individual and situated, and largely determined by custom and practice, current policy and individual teacher experience (p. 326). This extended case study shows a path for achieving meaningful, balanced interpretations of reality without requiring substantial investment of human and financial resources.

Conclusions: Methodological Issues in Comparing Places

This chapter has discussed the use of place as a unit of comparative analysis, taking the geographic/location dimension of the Bray and Thomas (1995) framework for comparative and multilevel analyses as its model and benchmark. It has explored the various levels of places that can be compared, and has identified alternative spaces cited in related literature. These derivative spatial units, partly generated by geopolitical, economic, technological and sociocultural transformations, are in fact potentially contained in the original framework and can be plotted on the cube. A variety of examples, culled from the specialist literature in comparative education, have been employed to illustrate their mechanics and to evaluate their usefulness. These encompassed both single-level and multilevel comparative analyses. In the process, some comments on methodological issues have been made.

The chapter commenced with an introduction to general approaches to comparative inquiry in education, setting the stage for the introduction of the Bray and Thomas framework in the second section. It argued that comparative studies, whether interpretative or causal-analytic, should pay careful attention to establishing the basis for comparability (*tertium comparationis*) in order to provide a foundation for meaningful interpretation of results. This implies that when researchers choose the units for comparison, they should diligently identify the parameters for comparability and their causal relevance to the educational phenomena. For this

purpose, the similarities and differences of the units being compared should be examined in context, to calibrate whether they are truly educationally important. Researchers should try to be sensitive to the axis of variation (see also Mason 2005), i.e. the axis along which differences may be ranked as to their degree of causal significance on the educational phenomena under study.

As cited in the above discussions, for comparison to be meaningful, the units of analysis should display sufficient commonalities to make their differences significant. There are however cases, including ones cited in this chapter, in which this rule of thumb has not been observed. Canen (1995) seemed to have glossed over the significant intranational diversity in Brazil and the UK; and Vidovich (2004) gave inadequate attention to the obvious international dissimilarities between Australia and Singapore. Both examples took their pair of countries as homogeneous, equivalent units for comparison. This led to an imbalanced and misleading interpretation of the data. Moreover, the comparison of curricula in Australia and Singapore (Vidovich 2004) overlooked the difference in magnitude between the two countries, a significant factor which paints an entirely different panorama in terms of educational politics.

These examples warrant an echo of the call for caution made by scholars of comparative education. Such scholars have emphasised the need to establish the terms of comparison – a minimal base of shared commonalities – such terms being causally important to the educational phenomena being researched. In this respect, comparative studies are to some extent like conducting a laboratory experiment. For an experiment to be valid and meaningful, certain variables need to be kept constant. A way to do so is by choosing units of analysis that have sufficient similarities that are educationally relevant. Discrepancies in size and context, as exhibited in the example on Australia and Singapore, and the consequent complexities in their educational governance and autonomy, are significant system-level factors that shape the lower levels of the schools and curricula. For this reason, a comparison between a huge and highly diverse and decentralised place such as Australia with a small, similarly diverse but centralised state such as Singapore deserves reconsideration. Nevertheless, these studies may still reach some meaningful results provided they dispel the “illusory differences” (Ragin 1987) and prove that such differences are, at an abstract or causal level, not significant. At the least, they can recognise the role of these exogenous factors and the limitations of their findings.

The main part of the chapter elucidated the potentials of the locational dimension of the Bray and Thomas cube, comprising seven levels: world regions, countries, states/provinces, districts, schools, classrooms and individuals. Alternative spatial units such as regional economic blocks, cities and virtual (non-physical) classrooms were also discussed. Each locational level captures a different dimension or angle of the educational reality under study and has its set of strengths and weaknesses. Analysis at the upper levels of the cube (world regions, country, state/province, district) contribute a broad, general framework of educational and demographic patterns. Studies which limit themselves to the macro levels, however, while useful and meaningful, tend to gloss over significant patterns and distinctive features at the meso and micro levels and their influence on educational events. The example from Dale and Robertson (2002), which analysed the educational strategies and agendas of three regional economic blocks, revealed that significant intra-regional diversity exists among the region's constituencies. Only a further exploration of the micro levels (school, classroom, individuals) and, in the case of highly decentralised and/or diversified countries, of the meso levels (province, district), can render a complete and realistic picture of the determinants of educational phenomena in these entities. In this light, Crossley and Vulliamy (1997) argued in favour of contextualised studies which take into account the dynamic and existential phenomena at the level of the school and the individual, especially in large countries where huge intranational disparities exist.

A corollary to this downward movement from the higher levels of the cube to the lower locational levels is a corresponding upward movement from the lower to the upper layers. Studies conducted at the lower levels of the cube may tend to disengage with the macro-level context in which they are embedded. They suffer, on the one hand, from a lack of transferability of conclusions to other contexts, and on the other, from a narrow and incomplete assessment of the determinants of educational phenomena seen at their level. As Sadler (1900, p. 310) cautioned: "the things outside the schools matter even more than the things inside schools, and govern and interpret the things inside." This alludes to the need for lower level studies (individual, classroom and school) to be understood within the broader context of higher levels of the framework (system, state, etc.). Only in this way can studies present a meaningful and comprehensive picture of the relationships between macro and micro levels.

The relative strengths and weaknesses of comparative analyses limited to one level of the geographic hierarchy point to the importance of multilevel research in order to gain a balanced and comprehensive understanding of the complex reality of educational phenomena. The different levels of geographic units, while distinct are not disjointed, hermetically sealed spaces. Rather, they are like ecological environments, conceived as a set of nested structures, each inside the next (Bronfenbrenner 1979, p. 3). The higher and lower geographic levels mutually influence and shape each other as in a “dialectic of the global and the local” (Arnove 2003, p. 1). A recognition and understanding of the mutual relationships subsisting across each of the spatial levels is indispensable for a holistic comprehension of the essence of educational phenomena. This fine-grained analysis of educational pathologies is important not only for conceptual understanding but also, and even more, for policy amelioration.

Multilevel analysis need not, however, be undertaken within the confines and limited tools of educational research. Rather, it is highly encouraged that comparative education scholars, as the field’s tradition espouses, engage in multidisciplinary collaborative research. Thus, Bray and Thomas (1995, p. 488) advocated “cross-fertilization from other fields” wherein micro-level quantitative work could be informed by the qualitative contributions from the field of cross-national comparative education. Similarly, macro-level comparative researchers would benefit from other fields that investigate the rich diversity at the lower levels of the state, districts, schools, classrooms and individuals, thereby giving their work balance, depth and completeness.

Multilevel comparative analysis is indeed desirable and feasible. While most studies of this kind require large-scale mobilisation of resources within or across countries, this chapter has provided several examples of multilevel comparisons within reach of most comparative researchers who normally focus at the lower levels of the classroom and individuals (e.g. Anderson-Levitt 2004; McNess 2004). At best, researchers who work on a single level of analysis can acknowledge the scope and limitations of their findings by explicitly identifying its location on the knowledge map. One way to do so is through the framework for comparative analyses given here.

Comparative, cross-cultural research can help provide tools for understanding and uncovering meaningful relationships from complex educational realities by striving for both conceptual and linguistic

equivalence, and emphasising the situatedness in time and space of particular social phenomena (McNess 2004, p. 326). This chapter has demonstrated that comparing places provides an exciting locus to examine varied educational phenomena at different levels of the spectrum. It also opens the discussion to exploring other units of analyses which are inextricably linked to place.

Comparing Systems

Mark BRAY & Jiang KAI

A great deal of comparative education research has focused on systems of education. Sometimes, however, this focus has been implicit rather than explicit, and the units of analysis have not always been clearly defined. This chapter begins by noting some prominent examples in which scholars have focused – or claimed to have focused – on systems of education. It then discusses methodological issues relating to the use of education systems as a unit of analysis in comparative research. It notes that some countries have multiple systems of education, and thus that research which focuses on systems can be intranational as well as cross-national.

Familiar Approaches but Loose Usages

The focus on systems has a long history in the field of comparative education. For example, the title of Sadler's (1900) oft-cited address was: "How far can we learn anything of practical value from the study of foreign systems of education?" Kandel (1933, pp. 83–206) focused on the organisation of national systems of education in six countries; the book by Cramer and Browne (1956) was entitled *Contemporary Education: A Comparative Study of National Systems*; and the following decade brought Moehlman's (1963) book entitled *Comparative Educational Systems*.

This focus was maintained during subsequent decades. Books appearing during the 1980s included Ignas and Corsini's (1981) *Comparative Educational Systems* and the set of three volumes co-edited by Cameron et al. (1983) entitled *International Handbook of Education Systems*. These were followed by the *Encyclopedia of Comparative Education and National Systems of Education*, which was edited by Postlethwaite and appeared in first

edition in 1988 and second edition in 1995. Books published at the outset of the present century include Steyn and Wolhuter's (2000) *Education Systems of Emerging Countries*, and Marlow-Ferguson's (2002) *World Education Encyclopedia: A Survey of Educational Systems Worldwide*.

However, some of these works were remiss in the clarity of definition. As noted by the previous chapter in the present book, the field of comparative education has been dominated by locational comparisons which have given particular prominence to the country or nation-state. Many of the works cited above in practice took countries as their principal unit of analysis. Their authors may have felt justified to use the word "system" insofar as they referred to national education systems; but few explored the conceptual boundaries of those national education systems or investigated the extent to which other systems coexisted within and across national boundaries. Many of the authors presented national education systems as if the nations in question had only single systems.

This point may be explained further by looking at a pair of examples written four decades apart. The book by Moehlmann (1963) took it as self-evident that readers knew what systems were, and proceeded to a set of 11 country chapters which implied that national boundaries and system boundaries were basically coterminous. It was particularly inappropriate to imply that the USA had a unified education system. The section on the USA did note (p. 79) that each of the 50 states "controls its own system of education", but this observation was not followed up to note the differences between these systems, and the bulk of the discussion in that chapter (pp. 75–81) was an overview of the country as a whole. More recently, Marlow-Ferguson's (2002) encyclopaedia was organised country by country, commencing with Afghanistan and ending with Zimbabwe, and mostly describing education in those countries as if it were in each case a unified entity. Even such countries as Belgium, Canada and Vanuatu, which each internally have strikingly different systems operating in different languages and with different structures, were presented in generalities as if they had unified national education systems. This was not only misleading but was also a missed opportunity for conceptual understanding. Comparison of systems within countries would have permitted identification of instructive similarities and differences, and would have promoted understanding of the forces which had contributed to those patterns.

Further, the tendency to focus on education systems by country obscures the fact that some systems operate across national boundaries.

Schools run for example by religious bodies, such as the Roman Catholic church or by Islamic bodies, may have commonalities across national boundaries (Grace 2002; Daun & Arjmand 2005). In a rather different domain, since 1999 universities in 29 European countries have increasingly been harmonised under the “Bologna Process” – named after the city in Italy in which representatives from 29 European countries agreed on guidelines “to promote the European system of higher education” (Bologna 2005). And taking yet another domain, many cities with substantial international communities host schools following the education systems of such countries as England, France, Japan and South Korea and being supervised and/or accredited by authorities in those countries (Hayden et al. 2002).

Defining and Identifying Education Systems

It must be admitted that scholars who are conscientious and careful in their use of terms encounter major difficulties when defining education systems. Among the classic scholars cited above, Kandel (1933, p. 83) was concerned with national systems and observed that: “To define a national system of education is not simple, despite the frequent use of the term.” The difficulty of finding an adequate definition, he added,

is not due primarily to the vast range of influences, formal and informal, which enter into the formation of the attitudes and outlook of the members of a nation, but to the absence of a single criterion by which the existence of a national system may be tested.

This problem has not been resolved, and remains challenging for contemporary scholars. For scholars of comparative education, problems are compounded by the fact that some languages have several different words which can each be translated as system but which each have different nuances and implications. In Chinese, for example:

- *jiaoyu zhidu* covers all kinds of educational institutions, including both the schooling system and the government institutions that administer schooling, and stresses the institutional aspect;
- *jiaoyu tizhi* means the system through which educational institutions are organised and controlled;
- *jiaoyu xitong* means an arrangement in which various component parts are linked together; and

- *jiaoyu tixi* is similar to *jiaoyu xitong* but stresses the structural rather than the institutional aspect.

For the purposes of this chapter, a system can be understood as a group of interacting, interrelated, or interdependent components forming a complex whole. The generic definition presented by Allport (1955, p. 469) was

any recognizably delimited aggregate of dynamic elements that are in some way interconnected and interdependent and that continue to operate according to certain laws and in such a way as to produce some characteristic total effect. A system, in other words, is something that is concerned with some kind of activity and preserves a kind of integration and unity; and a particular system can be recognized as distinct from other systems to which, however, it may be dynamically related.

This definition is closest to what in Chinese would be called *jiaoyu xitong*. It is useful for the present chapter since it can be applied to education as well as to other sectors. Moreover, it can apply to sub-national and cross-national education systems as well as to national systems.

It is useful also to refer to Archer's (1979) book, *Social Origins of Educational Systems*, which is widely regarded as a seminal contribution. Like many of her predecessors, Archer was particularly concerned with national education systems overseen by governments. She defined a state education system (p. 54) as

a nationwide and differentiated collection of institutions devoted to formal education, whose overall control and supervision is at least partly governmental, and whose component parts and processes are related to one another.

She added that education systems are created when the component parts cease to be disparate and unrelated sets of establishments or independent networks, and instead become interrelated to form a unified whole. In geographic terms, much of Archer's analysis was based on Denmark, England, France, Japan and Russia. She noted that in all these countries the state possessed formative, regulative and controlling responsibility for education systems.

However, systems can of course be operated by other bodies as well as by the state. This chapter will include examples of systems operated by religious and other non-government bodies. Moreover, even the state can

operate multiple systems and sub-systems. One methodological question might concern classifications and whether particular arrangements are indeed systems or sub-systems. The answer is often to some extent subjective – a fact that illustrates further the methodological challenges and attractions of this domain of enquiry.

Why Compare Systems?

In many cases the rationales for comparing systems are similar to those for undertaking comparisons of other units, particularly locational ones. Especially when the comparisons are of national education systems, then justifications may resemble those set out by Manzoni in the previous chapter. Manzoni noted interpretive and causal analytical reasons for undertaking comparisons, and highlighted the work of some of the classic scholars. Bereday, who was one of these was to some extent typical in focusing on systems but in practice making broader statements. Thus, when he wrote that “Men [sic] study foreign educational systems simply because they want to know, because men must forever stir in quest of enlightenment” (1964, p. 5), he was in effect presenting a justification for the whole field of comparative education rather than focusing on systems *per se*.

However, the question remains why education systems, and particularly national education systems have received so much attention. Part of the answer is that the nation-state from the 19th century onwards became a primary unit to organise and govern social, political and economic life. National governments assumed increasingly significant roles in education systems, and consequently contributed to differences between national educational systems. From the beginning of the 19th century, education was increasingly regarded as a tool to reinforce national strength. This tradition perhaps reached its peak during the second half of the 20th century. In more recent times, the forces of globalisation have eroded these views (see e.g. Wielemans 1997; Mitter 2004). However, many international agencies still base their work on the nation-state and both maintain and promote the notion of national education systems (see e.g. Asian Development Bank 2001; UNESCO International Bureau of Education 2001). Much scholarly work also either explicitly or implicitly promotes the concept of nation-states with national education systems (e.g. Adams 2002; Hofman et al. 2004; Guo 2005).

Nevertheless, one major reason for studying systems might be to *avoid* the notion of “one country, one system”. This goal is achieved when, for example, French-speaking Belgium is treated separately from Flemish-speaking Belgium, Zanzibar is treated separately from mainland Tanzania, and the Canadian Province of Quebec is treated separately from Ontario. The goal can also be achieved when private schools are compared with public schools, when Catholic schools are compared with Protestant schools, and when technical-vocational schools are compared with academic-grammar schools. Further, equation of countries with education systems raises the risk of perspectives which are rather static because national boundaries change infrequently. Analyses of systems that are not defined by geography are more likely to note the flexibility of boundaries and shapes. Thus, focus on systems may in some circumstances reduce the dangers of overgeneralisation and oversimplification, and help to show dynamic patterns of change.

A Set of Examples: China

Some of the above points can be illustrated through examples. The focus in this section is on three component parts of the People’s Republic of China (PRC), namely mainland China, Hong Kong and Macao.³ The education systems in each of these places have very different characteristics; but the differences are not only between but also within each location. Thus consideration of the PRC shows the potential for multiple instructive comparisons within a single country.

The Education Systems of Mainland China

Mainland China has a population of 1.3 billion, of which over 220 million are attending schools and universities. It has 289 cities, of which 48 have populations over 500,000; and the total area is 9.6 million square kilometres.

Particularly since a reform launched in the mid-1980s (China 1985), mainland China has undergone major changes in education. Cheng (1991,

³ The name of this territory is also commonly spelled Macau. That spelling has a long history of usage, and is still the official form in Portuguese. However, in 2000 the government decreed that official spelling in English would be Macao, which has long been an alternative form. This chapter uses the spelling Macao except where making quotations or referring to publications which use the spelling Macau.

p. 3) observed that “China’s education system is amazingly uniform when viewed in the context of its vast geographic area and huge population”. This feature was chiefly the result of a highly centralised mode of administration. However, as Cheng added, “on-going reforms and local constraints have engendered considerable variation among localities”. The 1990s and first decade of the present century brought increased diversity not only between but also within different locations (Mok 2003; Yang 2003).

Beginning with the structure of education, many parts of the country have for several decades operated a 6 + 3 + 3 + 4 system (i.e. six years of primary education, three years of junior secondary, three years of senior secondary and four years of tertiary education). However, particularly until the 1990s other parts operated a 5 + 4 system at primary/junior secondary, a 5 + 3 system, 5 + 1 + 3 system, nine-year integrated system or various other combinations. Hu et al. (1991, p. 111) indicated that in 1988 about 40 per cent of pupils attended six-year primary schools, but that the others were in schools following other structures. By 1991/92 the proportion of pupils in six-year primary schools had increased to 63.9 per cent, but wide variation still existed among the provinces (Table 5.1). The coexistence of the various combinations was partly a function of different provincial and local government

Table 5.1: Proportions of Pupils in a Six-Year Primary School System, by Province, Mainland China, 1991/92

Province	Total no. of primary pupils	% of pupils in a 6-year system	Province	Total no. of primary pupils	% of pupils in a 6-year system
Shaanxi	3,639,900	99.9	Hubei	6,155,000	77.7
Beijing	1,012,300	99.6	Jiangsu	5,948,000	66.2
Shanghai	1,125,300	99.6	Guangxi	5,775,500	59.1
Tianjin	865,500	99.5	Tibet	168,100	58.7
Guangdong	7,789,300	99.4	Zhejiang	3,626,400	55.6
Xinjiang	1,955,200	99.2	Fujian	3,426,100	51.1
Guizhou	4,338,500	98.7	Qinghai	468,500	42.2
Liaoning	3,915,400	98.5	Ningxia	661,400	35.0
Jilin	2,672,400	98.5	Gansu	2,431,100	31.9
Sichuan	8,815,900	98.4	Inner Mongolia	2,341,000	20.4
Hunan	6,876,300	95.7	Shanxi	3,014.8	19.3
Hainan	1,010,500	94.8	Shandong	8,151,500	15.2
Hebei	7,243,500	89.1	Anhui	6,173,300	10.1
Heilongjiang	3,871,300	82.3	Henan	9,440,200	8.8
Yunnan	4,425,700	78.5	Jiangxi	4,303,000	8.3
			Mainland China	121,641,000	63.9

Source: China (1992), pp. 260, 268.

policies, but also reflected contrasting conditions in rural as opposed to urban areas. The different structures required different curricula, and led to different outcomes. Central government policies had promoted a move towards a six-year primary school system; but diversity remained, in part because the overall advocacy of the government favoured decentralisation.

Variations also exist within the sub-systems. One major element is the key schools, most of which are located in cities and county towns (Zhong 2000, pp. 334–339; Guo 2005, p. 151). These institutions are allocated the best pupils, teachers and other resources within their catchment areas. The rationale is that resources should be focused on the more capable pupils so that they can be prepared for higher education. The key schools are also used as centres of in-service teacher training, and for conducting experiments in curriculum innovation. Key schools comprise only about 5 per cent of the total, but they generate the majority of university candidates in the highly competitive national College Entrance Examination.

Further variation exists in provision for China's minority nationalities (Postiglione 1999; Zhou 2001). In 2004, the population of the 55 minority nationalities was estimated at 106 million, i.e. 8.4 per cent of the total population (China National Commission for UNESCO 2004, p. 12). National policy advocates bilingual education, supporting use of both minority languages in education. This is not implemented with equal enthusiasm in all areas, but the languages of most minorities are taught at least at the primary level.

Diversity has also been brought by the proliferation of private schools. In 2002 private primary schools enrolled 2.2 million pupils representing 1.8 per cent of the total, and private secondary schools enrolled 3.1 million pupils representing 5.1 per cent of the total (Hu & Xie 2003, pp. 178, 180). These were not large proportions; but in mainland China they were especially significant since 20 years previously there had been no private schools at all. Moreover, at the secondary vocational level, private schools enrolled 9.1 per cent of the total (Hu & Xie 2003, p. 179). Many of these institutions had been established in urban centres to serve the children of the newly prosperous elite, but some were in rural areas and served families seeking different curricular emphases.

Further, especially in the major cities a number of international schools had developed with links to foreign education systems. Again the total numbers were small, but the trends were significant. In Shanghai, for example, 14 "schools for children holding foreign passports" had been established by 2004; and they were accompanied by a group of mainstream

schools which had been allowed to open international divisions (Yamato & Bray 2006). Some of these schools followed English-language curricula, while others stressed Japanese and other languages. In addition were schools focusing on the curricula of Hong Kong, Taiwan and other places. The diversification was expected to expand significantly during the coming years, both in Shanghai and in other cities.

The Education Systems of Hong Kong

Hong Kong is very small compared with mainland China. It has a population of only seven million, and a land area of just 1,071 square kilometres. The island of Hong Kong became a British colony in 1842, and the territory was subsequently enlarged by addition of sections of the mainland and neighbouring islands. In 1997, sovereignty returned to China. However, Hong Kong retains much autonomy as a Special Administrative Region with its own currency and legal system, and with local control over education. Hong Kong does have a rural periphery, but is basically an urban society. As such, a more productive focus for internal comparative education would be different types of school systems within the urban society, rather than systems which serve particular geographic areas.

As in mainland China, the majority of Hong Kong's schools may be described as part of a single territory-wide education system. However, some schools are outside the system; and even within the system there are various sub-systems. It is useful to show some evolution over time, and the following paragraphs begin with the 1990s. Table 5.2, which presents numbers of schools in 1993/94, indicates that only 8.0 per cent were operated directly by the government, though the 77.1 per cent in the aided sector

Table 5.2: Providers of Primary and Secondary Schooling in Hong Kong, 1993/94

	Primary	Secondary	Total
Government	47	39	86
Aided	511	323	834
Local	502	318	820
English Schools Foundation	9	5	14
Private	75	86	161
Local	56	68*	124
International	19	18†	37
Total	633	448	1,081

* Of which, seven schools were in the Direct Subsidy Scheme.

† Of which, four schools were in the Direct Subsidy Scheme.

Source: Hong Kong, Education Department (1993), p. 3.

were subject to extensive controls and were also considered part of the public sector. Many of the private schools were oriented towards local examinations and could also be considered part of the Hong Kong education system.

The principal schools outside the system were oriented to foreign models of education and catered not only for expatriate children but also for local families who sought education with different perspectives and curricular emphases from the mainstream system. Fourteen aided schools in 1993/94 came in this category. They were run by the English Schools Foundation (ESF), and followed the basic system used in England. In the private sector, international schools numbered 37 out of 161. They included schools following curricula from Canada, Indonesia, Japan, Korea, Norway and Singapore.

Within the mainstream system, one of the distinguishing characteristics of institutions at the secondary level was their medium of instruction (Table 5.3). The terminology used at that time distinguished between Anglo-Chinese and Chinese-middle schools. The former were expected to teach in English except for the subjects of Chinese and Chinese History; and the latter were expected to teach in Chinese except for the subject of English. The Anglo-Chinese schools operated a 5 + 2 curriculum, while the Chinese-middle schools had until the early 1990s followed a 5 + 1 system. The Chinese University of Hong Kong was founded in 1963 to be the apex of the Chinese-middle school system, and offered a basic four-year degree programme, while the University of Hong Kong was at that time the principal apex to the Anglo-Chinese system, and offered a basic three-year degree programme.

However, by the point in history to which Table 5.2 refers, the distinction between the language streams had become blurred. Increasing numbers of Anglo-Chinese schools claimed to be English-medium in order to attract students, but for reasons of practical pedagogy actually taught many classes in Chinese. Also, the Chinese University of Hong Kong selected increasing numbers of pupils from the Anglo-Chinese schools as well as from the Chinese-middle schools (Lee 1993). In 1988 the government decided first that three years should be the basic length of degree courses in all institutions including the Chinese University of Hong Kong, and second that all secondary schools in the mainstream should follow a 5 + 2 system. As a focus for internal comparative education, therefore, the sub-systems represented by these two language streams ceased to be so distinct.

Table 5.3: Secondary Schools in Hong Kong, by Medium of Instruction, 1993/94

	Government	Aided	Private	Total
Anglo-Chinese	33	299	56	388
Chinese	2	14	7	23
Anglo-Chinese and Chinese	3	5	4	12
English	1	5	15	21
Others	–	–	2	2
English and Others	–	–	2	2
Total	39	323	86	448

Note: These figures refer to day schools only.

Source: Hong Kong, Education Department (1993), p. 55.

In the late 1990s, a further policy change forced a much sharper distinction between schools operating in different media of instruction. Following stringent screening, only 114 public secondary schools – about one quarter of the total – were permitted to use English as the medium of instruction for their 1998/99 and future intakes. Implementation of this policy again created two groups of schools that were clearly defined by medium of instruction and that could be, and were, compared with each other (Standing Committee on Language Education and Research 2003; Education Commission 2005).

Other categories of schools were also worthy subjects for comparison. For example, the Direct Subsidy Scheme (DSS), which had been launched in 1991, allowed aided schools to become private institutions while still receiving government grants. It also allowed private schools to receive government grants if they agreed to meet certain standards and to follow certain regulations. Table 5.2 indicates that by 1993/94, 11 schools had joined the DSS; and by 2005/06 the DSS had expanded to 59 schools (Hong Kong, Education and Manpower Bureau 2005). The DSS financial and regulatory system differed from that of the mainstream, and therefore created another system within the system.

The international schools also deserve analysis from a methodological perspective. The primary and secondary schools operated by the ESF were supervised by a central administration, had common salary scales and fees, and operated as a system for modes of staff development, appraisal and other matters. As a system of their own, they could be usefully compared both with the mainstream and with the systems of other international schools. Some international schools were in effect parts of foreign systems that were operating in

Hong Kong. Institutions in this category included the Japanese and Singaporean schools which followed the official regulations of their home countries (Bray & Yamato 2003, pp. 58–59).

Perhaps even more interesting from a methodological perspective were individual institutions which operated more than one system. For example, the German–Swiss International School had a section which followed the German curriculum and another section following the curriculum of England. Likewise, the French International School had a section which followed the French curriculum and another section following the International Baccalaureate curriculum; and the Korean International School had a section which followed the Korean curriculum and another section following the curriculum of England (Bray & Yamato 2003, pp. 61–62). In these schools, the teachers in the different streams were subject to different expectations; and in the French and Korean International Schools the pupils in the different streams paid different fees. Thus comparative analysis of education systems could be undertaken not only within the broad territory of Hong Kong but even within individual institutions.

The Education Systems of Macao

While Hong Kong may be small compared to mainland China, Macao is smaller still. It has a population of just 440,000 and an area of only 24 square kilometres. Particularly since the mid-1990s, the government has devoted effort to building a Macao education system (Adamson & Li 2004; Macao 2004). However, considerable internal diversity remains.

As a distinct entity Macao dates its history from 1557, when Portuguese traders secured rights of settlement from the Chinese authorities. The territory remained under Portuguese administration until 1999 when sovereignty reverted to China. The model for the transition was very similar to that for Hong Kong, and Macao is also a Special Administrative Region which retains its own currency, legal system and control over education (Bray & Koo 2004).

Until the 1990s, Macao's colonial government took very little interest in education. It operated a small number of schools with a Portuguese curriculum which catered mainly for the children of expatriate civil servants and of locals with close ties to Portugal. These schools served below 10 per cent of the population. Other children either went to private schools or did not go to school at all. The private schools were not supported, controlled or even monitored by the government. Many schools were operated by

religious bodies, but others were run by social service organisations and commercial enterprises (Lau 2002).

One way to classify Macao's schools was set out in an official document (Macao 1989, p. 178), which identified four systems of education as shown in Figure 5.1. The classification was based on perceived external influences (see also Alves Pinto 1987, pp. 20–21). The models were labelled Portuguese, Anglo-Saxon, Chinese Traditional, and People's Republic of China; but these labels were based on partial misunderstanding of the systems in the places from which the models were presumed to have been imported. This in itself was an example of the need for dissemination of clearer information on the diversity of systems within countries. Anglo-Saxon was a misnomer because the model was imported from Hong Kong rather than the UK, and in any case the dominant model in Hong Kong was the Anglo-Chinese 5 + 2 rather than the Chinese-middle 5 + 1 system.

Figure 5.1: Systems of Education in Macao as Portrayed in a 1989 Official Document

	Portuguese	Anglo-Saxon	Chinese Traditional	People's Republic of China		
B A S I C	Primary	Primary	Primary	Primary	1	Y E A R O F S C H O O L I N G
					2	
					3	
	Preparatory				4	
					5	
S E C O N D A R Y	Junior Secondary	Secondary	Junior Secondary	Secondary	6	S C H O O L I N G
					7	
					8	
	Senior Secondary				9	
					10	
	Pre-University	Pre-University		*	11	S C H O O L I N G
					12	

* Some institutions in this system have a 12th grade. This may be considered a pre-university year.

Source: Macau (1989, p. 178).

The description of the 6 + 5 model as PRC was also inappropriate, since the dominant model there was 6 + 3 + 3 and none of the other models was 6 + 5. “Chinese Traditional” described a model imported from Taiwan, though it was unclear why that label had been chosen.

Figure 5.2: Systems of Education in Macao as Portrayed in a 1993 Official Document

	In Chinese	In English	In Portuguese	Luso-Chinese	
P R I M A R Y	1	P.1	1	1	Y E A R O F
	2	P.2	2	2	
	3	P.3	3	3	
	4	P.4	4	4	
	5	P.5	Preparatory 5	5	
	6	P.6	6	6	
S E C O N D A R Y	7	F.I/J.I	7	7	S C H O O L I N G
	8	F.II/J.II	8	8	
	9	F.III/J.III	9	9	
	10	F.IV/S.I	10	10	
	11	F.V/S.II	11	11	
	12	*F.VI/S.III	12		

Some schools adopt a junior and senior secondary system (3 + 3 years) while others adopt a five years secondary system. Among those schools that adopt the five years secondary system, some provide a further year of Form VI for those students seeking higher education.

Source: Macau (1993a), p. 205.

Perhaps following recognition of these questionable aspects, later official publications (e.g. Macau 1993a) classified three of the education systems more simply by their language of instruction (Figure 5.2). However, this classification was not totally by language, for it showed Luso-Chinese schools as a separate category. Luso-Chinese schools were operated by the government mainly in Chinese but with emphasis on Portuguese as a second language. The structure of the Luso-Chinese system differed from that of both the other Chinese-medium schools and the Portuguese-medium schools. Table 5.4 shows the number of schools at that time by their media of instruction. Most private schools were Chinese-medium, though two secondary schools (catering for 2 per cent of pupils) were

Portuguese-medium, and seven secondary schools (catering for 19 per cent of secondary pupils) were English-medium.

Table 5.4: Schools in Macao, by Ownership and Medium of Instruction, 1992/93

	Primary	Secondary
Government		
Chinese	6	1
Portuguese	2	1
Private		
Chinese	55	24
Portuguese	4	2
English	6	7
Total	73	35

Source: Macau (1993b), p. 2.

A further way to categorise the schools, also evident in official publications though not usually presented in diagrammatic form, was by sponsoring body. The government schools formed one category, though as noted above it was necessary to separate the Portuguese-medium schools from the Luso-Chinese schools. Within the private sector the largest group, forming 48 per cent of all private schools, was operated by the Roman Catholic church. These schools were accountable to the Bishop, and could in some respects be considered a system. However, many other schools were free-standing. Thus full classification by sponsoring body still required a large number of categories, many of which had only one institution.

As mentioned, since the mid-1990s successive governments have remedied much of the neglect and *laissez faire* approach of their predecessors, and have devoted major efforts to creating a more unified Macao education system. The authorities have promoted common salary scales and curricula, and set out policies on class size, school fees and other matters. This has reduced the internal diversity and the extent to which separate systems exist and can be compared along the lines of Figure 5.1. However, schools can still be compared according to their media of instruction, as in Figure 5.2. Moreover, the development of the unified Macao education system means that a unit has emerged for the territory as a whole which can then be compared with the mainstream education systems in Hong Kong and mainland China. Thus, considerable scope

remains for instructive intranational comparison within the boundaries of China as a whole.

Another Set of Examples: UK

The diversity of education systems within the UK has rather different historical roots and contemporary shape, and thus is itself worth comparing with the diversity within China. The first important point is that there is no single education system in the UK. Thus, for example, the title of Booth's (1985) article "United Kingdom: System of Education" was misleading and wrong. England, Northern Ireland, Scotland and Wales each have their own systems of education. Within each of these locations may be found further diversity of systems serving different religious, socio-economic and other groups, though the commentary which follows chiefly focuses on the different systems of each country within the UK.

Raffe et al. (1999) have presented a very useful paper on this subject, which used a metaphor from football to facilitate analysis. As the authors explained (p. 9):

The UK is represented by four "national" football teams, those of England, Scotland, Wales and Northern Ireland. Matches between these teams were once called "home internationals". Each home country of the UK has its own education and training system; this paper presents the case for "home international" comparisons of these systems.

The authors proceeded by noting that many people do not understand the differences among the four systems and/or consider such differences to be a nuisance not deserving detailed attention. They added that:

Many researchers shift their focus between England, Great Britain and the UK depending on the institutional context or the availability of data; others purport to cover the UK but in fact describe England, typically dismissing Scotland, Wales and Northern Ireland in the ritual footnote; others simply ignore the differences and treat England, Great Britain and the UK as synonymous (p. 10).

Yet these differences between the UK systems might be considered not so much a problem as an opportunity for research, an arena for empirical and theoretical challenges, and a source of lessons for policy and practice.

Raffe et al. (1999), partly basing their observations on the more detailed work of Bell and Grant (1977), commenced with a historical outline. Two critical developments, they noted, were the formation of nation-states and the emergence of national education systems. Wales was politically incorporated with England throughout the period when its education system developed, and as a result the differences between Welsh and English education have historically been small. However, the systems increasingly diverged at the end of the 20th century. The national curriculum for Wales specified that the Welsh language was compulsory in all state-funded schools (Gorard 2000, p. 31), and other differences in curriculum emphases were underpinned by the existence of separate bodies for public examinations and for overall governance.

The system of education in Scotland, by contrast, had long had completely separate identity (Matheson 2000). Compulsory education was first promoted by an Act in the 15th century, and Scottish education began to develop as a distinct national system before the union of Scotland and England in 1707. In contemporary times, among the most obvious structural differences is that senior secondary education in Scotland leads to higher examinations which are followed by a four-year basic degree structure in universities, whereas in England senior secondary education leads to advanced (A) level examinations which are followed by a three-year basic degree structure in universities. Unlike Wales and England, Scotland does not have a national curriculum: the authorities have only issued guidelines and never prescriptions on the curriculum. Scotland also has differences in the duration of primary schooling, the system of school inspection, regulations on maximum class size and the nature of school governance (Matheson 2000, p. 73).

Ireland in turn developed a national system of elementary education in the 1830s, earlier than such a system became effective elsewhere, but it was divided along religious lines (Bell & Grant 1977, pp. 47–51). In 1920, the main part of Ireland separated from the UK and became an independent republic. The education system of Northern Ireland, which remained part of the UK, diverged from that in the republic and moved closer to the systems of England and Wales. Nevertheless, Northern Ireland retains important differences. For example, the secondary school system in Northern Ireland is selective, with pupils going to grammar schools or secondary intermediate schools according to academic ability. In Scotland and Wales, by contrast, almost all state schools are comprehensive. In England, the pattern is more diverse, with most schools being nominally

comprehensive but some areas retaining selective grammar schools. Northern Ireland also has different regulations on school governance, many of which have been shaped by the territory's political and religious history (Dunn 2000).

Summarising similarities and differences between the four systems at the close of the 1990s, Raffe et al. (1999, pp. 17–18) made following observations:

1. *The systems were interdependent* to a greater extent than in the case of separate nation-states. The interdependencies were complex, and the observation by Bell & Grant (1977, p. 13) that “no two systems enjoy the same relationship” remained valid. The four territories still belonged to the same political system, and each remained constrained by such factors as UK fiscal policy and labour market institutions.
2. *The similarities were more important than the differences.* All four systems had common features, including the broad institutional structure of schools and colleges; the structure, function and timing of certification; and the scale, structure and functions of higher education.
3. *The differences varied* according to the territories concerned (England and Wales were the most similar, and Scotland was the most different), and according to the sector of the system (there was more variation in respect of “education” than “training”).
4. In a few respects *the systems of the UK represented different types of systems*, and would be categorised differently in cross-national typologies. One such difference concerned secondary schooling: Northern Ireland had a selective system, and Scotland and Wales had comprehensive systems. Another difference concerned upper secondary education: Scotland had moved towards a unified system whereas the rest of the UK had consolidated a form of tracked system.
5. In a much larger number of respects *the differences among the systems represented “variations upon common themes”*. Similar functions were performed in slightly different ways, and similar institutions and structures performed slightly different functions. For example, schools and further education colleges had broadly similar functions across the four territories, but the differences were still significant.

6. Although most of these “variations upon common themes” were relatively unimportant individually, *their cumulative impact was much more significant*. Devolution of powers to administrative bodies in each territory created subtle and diffuse pressure for divergence between the systems.
7. *The social relations and societal contents of education and training varied less* across the four home countries than they typically do across nation-states; the most significant cultural differences concerned the politics of education and national identity, rather than individual behaviour.
8. *The relations among the four systems were changing rapidly*. There was potential for the four systems to diverge, especially in respect of post-compulsory education.

Conclusions

At least on the surface, systems have long been a prominent unit of analysis in the field of comparative education. However, detailed scrutiny shows that scholars rarely define what they mean by systems. The field has had a tendency to equate systems with countries, and relatively few studies have explored sub-national and cross-national systems. One challenge arises from definitions, since education systems are not easy to conceptualise or delineate. However, a challenge may be turned into an opportunity: scholars can explore the implications of different definitions and boundaries, and can identify the ways in which different ways of conceptualising education systems can lead to different insights and understandings.

The chapter has remarked that systems may be of multiple types, and can be identified by both spatial and functional criteria. The spatial criteria basically refer to systems defined by geography, such as mainland China, Hong Kong and Macao, or England, Northern Ireland, Scotland and Wales. Functional criteria embrace systems with particular curricula and with administrative frameworks such as mainland China’s key schools and Hong Kong’s DSS. Systems may also be defined by public or private ownership, and by administrative authority such as churches or other sponsoring bodies. Some scholars might argue that these categories describe sub-systems of larger entities rather than separate systems that operate in parallel. Such matters are themselves worthy of debate and

exploration, to examine the nature of boundaries in particular circumstances and at particular points in time.

Following their study of the education systems of the UK, Raffe et al. (1999, pp. 18–20) presented several arguments for giving “home international” comparisons much greater priority than they had hitherto received. The first concerned the potential theoretical contribution. Since the mid-1980s, Raffe et al. suggested, many comparative researchers had been influenced by a “societal” approach which emphasised the need to analyse education systems in the context of the labour market, the production system and other contextual variables. However, the authors suggested (p. 19):

The societal approach is open to criticism. In focusing upon the uniqueness of national education and training systems and their societal contexts, it diverts attention from the structural similarities of systems, from their internal variation, from their interdependence and from the diffusion of educational practices between them. In particular, societal analysis tends to assume that each society has clear and unambiguous boundaries and that the boundaries of education and training systems coincide with the boundaries of the economic, social and political institutions which provide the societal context.

Many studies within the societal tradition, Raffe et al. proceeded, have focused on larger and more self-contained systems such as France and Germany. Home international comparisons reverse the assumptions on which much research in this tradition is implicitly based, and therefore provide a critical test of the approach and some of its theoretical underpinnings.

Raffe et al. also observed (p. 19) that home international comparisons may help in the conceptualisation of interdependence of systems:

Many education and training systems share common histories and present day systems increasingly influence each other. They compare each others’ performance and processes; they learn lessons from each others’ institutions and policies; they harmonise arrangements in such fields as qualifications and students mobility; and they submit to the authority of supra-national bodies such as the European Commission and the World Bank.

As well as applying to the UK, such remarks may be relevant to Hong Kong and Macao. Analysts of course compare performance and processes across national boundaries; but when the systems exist within a single location, the common frameworks of macroeconomics, politics, etc. reduce the range of external variables impacting on the education systems and make differences between those systems all the more significant and informative.

A further observation by Raffe et al. (p. 22) concerned the practicalities of undertaking comparative research within countries. In the UK, they suggested, such research may be undertaken more easily and more cheaply because the work is

facilitated by a common language, cultural affinities, a common administrative environment and geographical proximity. Costs of travel and communication are lower. Collaboration among UK universities or research institutes, where research is organised and funded along similar lines, is likely to be easier than among institutions in different nation states where these things are organised differently. Funding is more likely to be available from a single source. More statistics and datasets for secondary analysis are available on a comparable basis across the UK than across nation states (though many key datasets only cover Great Britain or England and Wales).

This observation could equally apply in Tanzania, the USA, and many other countries. However, Raffe et al. themselves stressed that the argument should not be exaggerated. They found that reconciling the differences in design and definition across the youth cohort surveys of England and Wales, Scotland and Northern Ireland, respectively, was just as difficult and challenging as the construction of a cross-national data set for Ireland, The Netherlands and Scotland. Moreover, intranational comparisons within large countries such as the USA do not necessarily incur lower travel and communication costs than international comparisons between, say, Hungary and Poland. And while in the UK it is possible for researchers to conduct all their work in a single language, that would not be possible if comparing the education systems of Flemish-speaking and French-speaking Belgium or the Canadian provinces of French-speaking Quebec and English-speaking Ontario. This observation raises an instructive comparative question about the ease or difficulty of undertaking similar types of research in different settings.

Taking this further, one might envisage a matrix of internal and cross-national studies. For example, since Canada, Cameroon and Vanuatu all have both Anglophone and Francophone education systems, scholars could conduct not only three separate studies of each country, but also a single study in which the three cases are placed together. Alternatively, holding language as a constant, the diversity within Anglophone Canada has parallels with the USA and with Australia. As in the earlier example, in addition to single-country studies the three cases could be put together.

Other questions are applicable to supranational studies of education systems. Much work remains to be conducted on a wide range of themes, some of which are emerging as the forces of regionalisation and globalisation penetrate more deeply. The Bologna Process in European higher education was mentioned above. It is one domain which has already stimulated much comparative work that has branched into new conceptual avenues (e.g. Neave 2003; Witte 2004). Other work can usefully focus on such topics as the impact of supranational examinations such as the International Baccalaureate, which to some extent create cross-national school systems based on curriculum (see e.g. Lowe 1999; Hayden et al. 2002); and on the ways in which the agreements of the World Trade Organisation facilitate operation of the education systems of dominant countries across national borders (see e.g. McBurnie & Ziguras 2001; Robertson 2003).

The study of systems can thus itself be multifaceted. On the one hand, it can embrace the focus on national education systems, which has long been a traditional focus in the field; and on the other hand it can embrace a focus on intranational and cross-national systems. Some of the smallest territories, such as Macao, may provide extremely fertile soil for analytical studies; and in the case of some international schools in Hong Kong, comparison of systems may even be undertaken at the institutional level. Thus, work which focuses on systems as the unit of analysis is rarely simple but can indeed be rewarding and instructive.

Comparing Times

Anthony SWEETING

How may one provide an introduction to comparing times within the field of comparative education that is more than a perfunctory handshake? A prerequisite is to reconnoitre the fundamental concepts involved, specifically in respect of “time” and its application in the field as a unit of comparison.

Time

It is simplistic and existentially improper to confine the meaning of Time to its role in physics as one of the key factors in the calculation of velocity. Instead, one may recognise that its components include ordinal sequencing, seriation and duration. And although the ordinal nature or sequence of events may *seem* to be immutable (and therefore absolute), further consideration reveals that, because of such real possibilities as temporal coincidences, simultaneity, or instantaneity and subjective experiences by different individuals, the recognition of sequence may vary. Similarly, via the hazards of memory or the rigours of careful retrospection, it is common for either different people or even a single individual to construct more than one temporal series from the same aggregation of events. Further, as is almost universally recognised, duration, even if measured by the most accurate clock, may be experienced in very different ways depending on interest, engagement, happiness, etc. Thus, for reasons rather different from those advanced by Einstein or Hawking, one may sensibly conclude that time is in many respects relative, and that it is not a simple, linear, autonomous entity discrete from space, but may properly be considered, existentially as well as physically, an aspect of space-time.

Especially in the context of globalisation, with its possibilities of more or less instant communications, a bewilderment of time zones for individuals, groups and institutions becomes a (postmodern) reality. For all these (and no doubt other) reasons, time seems particularly suited to the mental application of comparison.

In using time as a unit of comparison, it becomes immediately obvious that there are several “types” to consider. These include (but are not confined to) astronomical time, biological time, geological time, and the two most significant types for the purposes of this chapter: personal time and historical time. Despite the increasing intrusiveness of clocks and watches, personal time is, in important ways, subjective and relative, whether one is considering it as a whole and in relation to a sense of maturation/ageing or in a more partial way, related to appointments, punctuality, the duration and sequence of lessons, a whole range of different “calendars” (social, professional, family, recreational, etc.), and a sense of busy-ness or stagnation.

Further, although it is tempting to designate historical time as society’s or the state’s equivalent of an individual’s personal time, more educational importance derives from recognising the interconnections between personal and historical time. Thus, the development of “historical consciousness” derives from an individual’s recognition of the interface of personal with historical time (Rusen 1987; Borries 1994). With regard to comparing time in comparative education research, one should note that the achievement of historical consciousness involves linkages. In particular, especially in connection with an individual’s perception, it is built upon the awareness of one’s own place within the context of historical time, as well as the continuing refinement of one’s own skills of “synchronism” (the positive and creative aspects of an ability to detect anachronisms). As far as macro-level comparisons are concerned, however, Cowen’s (2002b, p. 416) reminder about the significance of differences in “developmental time” is, like the emphasis on different “presents” by Nóvoa and Yariv-Mashal (2003), particularly apposite. The recognition of the possibility of this type of cultural and contextual difference is crucial to the formation of valid comparisons.

As has already been intimated several “times” in this chapter, it is also worthwhile to compare and in this way discover the differences between the abstract and complex concept of “time” itself, in all its numerous usages, and the more familiar notion of “(the) times”, as quite commonly illuminated in such expressions as “the life and times of so-and-so”.

Songwriter Bob Dylan was much closer to the latter sense when he averred that “The times they are a-changing.” According to Dylan, people in general, writers and critics, senators, congressmen, mothers and fathers, all need to recognise and all have grounds for recognising the volatility of the times. His list could also include researchers in the field of comparative education. Many of these may wish to compare two or more distinctive times (or phases) in educational development in one or more places, and thereby reach tentative conclusions about the nature of these “periods”. A few may be confident enough to attempt to identify a *zeitgeist* – a time-spirit – for each of the periods or ages. Less ambitiously, by comparing events, ideas and attitudes within one period or between more than one, a researcher is able to reach reasoned conclusions about such matters as continuity, change and development.

Cowen (2002b), at least in his titular focus on the *moments* of time (and, thus, on temporal units, metaphorically in freeze-frame) appears unnecessarily hampered for the appreciation of the *movement* and *passage* of time, the sense of pace or stagnation. Possibly, part of the obstruction derives from his continuing insistence that comparative education is necessarily confined to the study of more than one education system, normally identified with more than one nation-state (e.g. Cowen 2000b, p. 335). Moreover, different perceptions of present educational situations and/or future educational prospects are open to comparison, as well as past educational achievements. Therefore, in addition to the somewhat atomistic-sounding “moments of time”, it may be helpful to employ the broader notion of “comparing times” in delineating the historical dimension.

Historical Approaches to Comparative Education

Periodically, workers in the field of comparative education take time off from their regular labours to ponder the point of it all. Unsurprisingly, such reflections and reflexivity frequently occur at times perceived to be significant anniversaries: the special issue of *Comparative Education Review* to commemorate two decades of its life (Vol. 21, Nos. 2 and 3, 1977) and the pair of millennial special numbers of *Comparative Education* (Vol. 36, No. 3, 2000; Vol. 37, No. 4, 2001) are among the examples of this pattern. Collections such as these, together with more discrete publications about theories and methodologies related to comparative education research (e.g. Bereday 1964; Altbach & Kelly 1986b; Cummings 1999; Rust

et al. 1999; Watson 2001a; Bray 2003b), make extended discussion here unnecessary.

Suffice it to note that the present writer shares the view that comparative education may appear to be both “promiscuous” (Broadfoot 2003, p. 275) and “characterised by eclecticism” (Ninnes & Burnett 2003, p. 279); that, ostensibly at least, it accommodates area studies, social science-based studies, and development/planning studies, together with numerous hybrids (Hawkins & Rust 2001); but that some of its practitioners tend to be more (puritanically?) exclusionary than others – see, for example, Epstein’s (1987) criticisms of Farrell’s work on Chile. The present writer also accepts the notion that comparative education has, and should value, multidisciplinary traditions. Following several luminaries (e.g. Noah & Eckstein 1998; Broadfoot 2000; Hawkins & Rust 2001; Wilson 2003), he notes that recognition of the value of historical insights by workers/theorists in the field of comparative education itself has a venerable history.

As far as significant research output is concerned, however, there was something approaching a hiatus in historically oriented comparative education studies in the period from the late 1950s to the 1990s (Rust et al. 1999). This is open to explanations that focus narrowly on changing intellectual fashions, especially the academic popularity of positivist social science approaches from the late 1950s onwards, the attractions of neo-Marxist approaches from the mid-1970s, and the appeal of neo-liberal and postmodernist viewpoints from the 1980s. It is also open to explanations that seek to identify broader (non-intra-field-specific) influences, such as the impact of Sputnik, the end of the Cold War, postcolonial realities and rhetoric, the revolution in microtechnology, and so on.

Around the turn of the century, calls for a re-finding, reinvention, and/or reconceptualisation of historical approaches to comparative education reverberated. Thus, Watson (1998, p. 28) declared that “instead of anguishing over the value and justification for comparative education we need to re-find its roots in historical and cultural analysis”. Kazamias (2001, p. 447) argued for “the reclamation of the disappearing historical legacy in comparative education”, but for reinvented historical approaches that make “use of *concepts, abstractions, or even theories*, which to a degree more or less, provide lenses or frameworks to compare, explain and interpret historical phenomena” (p. 446). And while some comparativists and historians may balk at the frequent recourse to categorical

imperatives in Nóvoa and Yariv-Mashal's (2003) polemical essay, many (including the present writer) would accept its finding (p. 435) that

we are facing an important role for historical research within the comparative discipline, one that would enable comparative work to trace the conceptualization of ideas and the formation of knowledge over time and space. One could picture such a theoretical framework for comparative studies as a multidimensional process in which research is grounded in "local histories", but is based and embedded in different forces, connections, times and places. The reception of each of these histories in different "presents" will produce an individually, historically contingent social, cultural and educational discourse.

Less dogmatically, Cowen (2000b, p. 333) argues that "there should be no "conclusion" if one is discussing comparative educations of the past, and potential comparative educations of the future". "At best", he suggested, "and also at least, there is a continuing conversation". For this reason, he advocated the use of the plural expression "comparative educations" rather than the singular (and possibly exclusive) "comparative education". One can have no serious objection to this suggestion, even though usage of "comparative education" as a collective, "catholic" concept may serve to encourage an ecumenical approach, as is commonly alleged to be an outcome of comparative religion. As a modest contribution to Cowen's continuing conversation, one could characterise comparative education as all efforts to detect and comment on similarities and differences between forms of education, whether these forms are expressed in locational or in temporal terms (Sweeting 2001). And, at the risk of provoking the exclusionists, one could also show tolerance (welcome?) for "work done in cognate fields, as well as ... [for] important international work carried out by people who do not identify themselves as 'comparativists'" (Evans 2003, p. 418). Presumably, this would include at least some of the work of cross-cultural psychologists, economists of education, educational sociologists and even historians of education (Green 2002).

Significantly, in an even more germane article, Cowen (2002b) chose the journal *History of Education* as an appropriate vehicle for comments on the "unit ideas" of comparative education, focusing particularly on concepts of time. He argued, at least implicitly, that the two fields (History of Education and Comparative Education) were affiliated and overlapping. More explicitly, he asserted (p. 413) that both fields undertheorised time,

but speculated that in practice they “are differently sensitive to time and use different concepts of it”. Following Cowen’s lead, the present chapter, part of a book on approaches and methods in comparative education research, necessarily comments on issues affecting the study and writing of histories of education as well as the more historically aware works within the commonly acknowledged field of comparative education. It seeks to investigate further the concepts of time actually used, and remains open to the possibility that the two fields differ not primarily in the concepts of time to which each appeals, but in the emphasis on it that each presents.

Histories of Education

In one sense, all histories are comparative. Their necessary involvement with time and chronology, continuity and change depends upon a degree of comparison. However, some histories are more comparative than others, in the same way as some “periods” or “ages” are more transitional than others.

Prevailing Forms of Histories of Education

Histories of education have their own history, of course (Aldrich 1982; Gordon & Szreter 1989; Lowe 2000; Popkewitz et al. 2001; Gaither 2003). Without the space, time or justification to make a significant addition to this literature, here the present writer is content to construct a (no doubt, incomplete) taxonomy. He considers seven rather different kinds of histories of education in order to assess their role and value in comparative education.

1. **Doctrines of the Great Educators.** This category, echoes the title of a once widely read book (Rusk 1969). While bestriding the academic disciplines of philosophy and history, the approach focuses on a summary of “doctrines” considered to be seminal in education, commonly including ideas associated with Plato, Aristotle, Comenius, Rousseau and Dewey. Inevitably, works in this category tend to be narrowly text-based (or, more often, derived from paraphrases of the relevant texts). They rarely include a consideration of broader sociocultural, economic, and/or political aspects, although some contain brief, usually uncritical, biographical data. They have not played a conspicuous part in the modern research literature of comparative education, but one can

detect something of a resurgence of their influence with the increasing popularity among academics of dicta emerging from poststructuralists.

2. **Institutional Pieties.** Like the former category, such publications are commonly uncritical and narrow (even parochial). A large sub-category of this type comprises published "party-pieces" to celebrate anniversaries, centenaries, etc. Apart from serving as a repository for what might be expected to be accurate dates, place names, personal names, attendance statistics, and, perhaps, formal curricula, they do not contribute significantly to the process or product of research in the field of comparative education. This does not, of course, mean that all histories of single institutions or even all anniversary publications are of this type. Among honourable exceptions are a publication to celebrate the centenary of the University of London Institute of Education (Aldrich 2002) and another to commemorate the 90th anniversary of the University of Hong Kong (Chan Lau & Cunich 2002).
3. **Polemical Broad­sides.** In one respect, very different from the former categories, these types are nothing if not critical. Almost by definition, however, many of them retain a narrowness of focus, especially those whose main purpose is to affirm a particular political or philosophical position. At least some of the work influenced by critical theory and postcolonialism suffers from this sort of narrowness and partiality. At worst, it abuses historical approaches by subordinating existing evidence to the exigencies of the argument, thereby using evidence in a cavalier and selective way (Carnoy 1974; Meyer et al. 1992; Pennycook 1998). At best, it stimulates both discussion and a search for confirmatory or refutative evidence (Green 1997; Apple 1999, 2000). Thanks to the influence of, among others, critical theorists, dependency and world systems theorists, postcolonialists, postmodernists, and poststructuralists, there can be little doubt that historical perspectives derived from polemics have had and continue to have significant influence on comparative education research.
4. **Policy Studies.** Almost inevitably overlapping with polemical broadsides, a more rigorously research-oriented form of publications that frequently offer historical perspectives and insights comprises those that are most closely related to specific policies. Several such works focused on centralisation/decentralisation (e.g.

- Sayed 1999; Tang & Bray 2000; Whitty & Power 2000; Mok 2003), other aspects of administration (Green 1990; Watts 1998a; Lau 2002), the apparent paradox between professionalisation and the de-skilling of teachers (Apple & Teitelbaum 1986; Ginsburg 1995), curriculum policy (Beyer & Apple 1988; Morris et al. 2001; Philips 2000; Bolton 2002), and perceived effects of globalisation (Sweeting 1996; Davies & Guppy 1997; Welch 2002; Mok & Welch 2003). It is not only true that works such as these are useful for researchers in comparative education, it is also the case that the majority of the authors cited above would actually admit to working in this field.
5. **Archival Anthologies/Substitutes.** Among education-focused archival anthologies are works on England and Wales (Maclure 1986), China (Fraser 1965, 1971), and Hong Kong (Sweeting 1990, 2004), although some of these publications also incorporate much non-archival material. Their main value to researchers in comparative education is as a convenient short cut to historical evidence. At their worst, however, in books of this kind obtrusive editorial comment that is predominantly text-centred and even text-modifying (e.g. Bickley 2002) distracts the researcher without adding important historical insights. Archival substitutes include books that are based upon particular legislation (e.g. McCulloch 1994; Jennings 1995). In a more general sense, they are also represented by earlier, largely top-down accounts of historical development (e.g. Curtis 1967; Dent 1970). Their role in comparative education research rarely transcends that of “crib-book”.
 6. **Boiler-Plate Accessories.** Of even humbler use are the brief and often bald statements included in their publications by some comparativists in a type of passing courtesy to the “historical dimension”. These often read as if they have been extracted from a much-used, but possibly second-hand, set of boiler-plate expressions (e.g. “Hong Kong was founded as a British colony in 1842 and returned to Chinese sovereignty in 1997”). They are almost invariably confined to macro-political matters and/or top-down, narrowly education-related data (e.g. the dates of White Papers, Education Acts, and official reports). In comparative education publications, these are better than nothing – but only just. They advance the understanding only of readers who would, otherwise, be completely ignorant of the topic/place/time being

discussed, but even such readers gain little in terms of profundity or scope.

7. *Social Histories*. On the other hand, ever-increasing numbers of social histories of education have been published (e.g. Silver 1977; Archer 1979; Gray et al. 1983; Lowe 1988; Green 1990; Grosvener et al. 1999; Urban 1999; Kallaway 2002; Wegner 2002). These are the sorts of works from which researchers in comparative education are likely to benefit most, especially from the ways in which they illuminate cultural and other contextual matters and especially in the planning and processing of their research.

Prevailing Theoretical Perspectives

Many historians would agree with Kazamias (2001, p. 446) that, if asked to explain themselves, they (or, at least, the majority of their colleagues) typically adopt an a-theoretical position. Others would prefer to describe themselves as eclectic, ready to use the theoretical stances they deem appropriate to the topic they are investigating. It is, however, also the case that both a-theoreticism (mainly as revealed by a disdain for discourse about theory) and eclecticism are, themselves, theoretical standpoints. Moreover, as Kazamias proceeded to emphasise:

Most historians are not theoretical, but most comparative historians and, by extension, most comparative educational historians use theoretical insights, often derived from other disciplines. These could involve theories (such as functionalism, Marxism, modernization, or post-colonialism), or concepts of limited or more general applicability (e.g. class, capitalism, power, conflict, violence, reproduction, dependence, democratization, globalization, systematization, segmentation, habitus, etc.), which provide the lenses or the medium to select, organize and interpret the historical material.

In the past few decades, theoretical positions, more or less consistently adopted by individual historians of education and/or researchers in comparative education who make use of historical perspectives in their work, include the following (slightly modified from Kazamias' list):

- *Marxism/Critical Theory* (e.g. Simon 1970; Bowles & Gintis 1976; Silver 1977; Apple 2000). This approach emphasises economic factors and, especially, the influence of social class on both policy and

practice. It is sometimes criticised for the air of inevitability that it introduces.

- *Dependency Theory/World Systems Analysis* (e.g. Wallerstein 1974; Meyer et al. 1992). These closely related approaches are critical of the alleged hegemony over the “developing world” exercised by the more developed nations, especially those of the “West” and the “North”. At times, however, work in this tradition appears itself to be condescending and to assume wrongly that, simply because similar vocabulary is used (say, for the names of subjects in school curricula), outright copying of cargo cult proportions has occurred.
- *Poststructuralism* (e.g. Ball 1994; Pennycook 1998). In academic circles, this approach has gained popularity over the past few decades. It has the advantage of permitting, even encouraging, subjective “deconstructions” of policy and/or practice that are at odds with historical statements of intention. On occasions, its links with publicly verifiable evidence are, to say the least, tenuous.
- *Postmodernism* (e.g. Popkewitz 1994; Lowe 1996). Postmodernism, like its close relative Poststructuralism, provides its adherents with a flexibility of approach. It also provides a salutary corrective to rigidly linear and exclusively reason-based views of education (or anything else) that its adherents regard as typical of “modernist” thinking first expressed in Europe during the Age of the Enlightenment. It offers opportunities for a multidimensional, impressionistic appreciation of realities, but tends to underemphasise more conventional explanations of motivations, causes and effects. Some of its adherents fail to consider whether any approach could possibly be post-postmodernist and, at least in this sense, they are a-historical.
- *Postcolonialism* (e.g. Benton 1996; Tikly 1999). This approach places colonialism and most especially its evils at the centre of attention. It has the value of challenging dated assumptions about alleged cultural and racial superiority, and it certainly recognises the possibility of incipient neocolonialism being practised in a range of mainly economy-related ways. As is the case with poststructuralism and postmodernism, the danger has occasionally existed that its adherents are more interested in political correctness than in actual evidence.

- *Feminism* (e.g. Stromquist 1990; Watts 1998b). This approach, too, has served the purpose of challenging and/or revealing unthinking prejudices, and therefore is to be welcomed as a healthy reminder about important aspects of education. At times, however, its advocates' understandable enthusiasms reach obsessive levels and some of the advocates may "invent" or exaggerate past examples of male chauvinism or female exploitation for situations in which gender was not the main issue.
- *Neoliberalism/New Managerialism* (e.g. Townsend 1996; Reynolds 1998). These approaches seek historical evidence to illustrate the virtues of minimising government "interference" in education and to recognise the positive values of the operation of market forces. Adherents tend to acknowledge rather limited concepts of "effectiveness", whether applied to schools, teachers, students or policies, and to treat education itself essentially as a marketable commodity and not as an encounter or experience.

Some researchers (e.g. Farrell 1986, p. 8) have continued defiantly to eschew theory. They serve as counter-examples to the suggestions advanced by Kazamias (1961, pp. 90–96; 1963, p. 388; 2001, p. 446) and Nóvoa and Yariv-Mashal (2003, p. 430). Martin (2003) emphasised the similarity of the findings reached by such a theory-free approach (Farrell 1986) with those emerging from a theory-laden one (Jansen 1991). And few, if any, historians would deny making use of organising concepts such as class, capitalism, power and conflict in the course of their work.

Characteristics of Modern Historical Analysis

Modern historiography has included much debate about the nature of historical explanation, especially in connection with the role, if any, played by "Covering Laws" (Gardiner 1961; Roberts 1995; Haskell 1998; Fetzer 2000; Hamilton 2003). Although many historians resist the social science-flavoured appeal of Covering Laws, most of them, as noted above, would accept that they have recourse to generalisations, especially in the form of organising concepts and especially as "closed-class generalisations". Thus, for historians, even such concepts as "class", "capitalism", "power", etc. are to a significant extent historically contingent, with their precise meanings capable of change according to time, place and context. Among historians of education and comparative education researchers

with historical interests, Simon has frequently focused on class, Bowles and Gintis on capitalism, Silver on opinion, Green on state formation, Carnoy on colonialism, Urban on exceptionalism, Gray et al. on reconstruction and many others on education policy making. The world of comparative education, generally, benefits from the light cast on these closed-class generalisations by historians. It also benefits from historians' use of "colligation" (Walsh 1967). This is the process by which historians seek to establish, from several individual events, shared motives or purposes or significance, and thereby to link such events together as some movement or policy or trend. The comfortable affiliation (indeed, the compatibility) of comparative education research with the discipline of history is strengthened by the fact that the process of colligation essentially involves comparison (via interpolation into and extrapolation from a constructed series of events).

Other ways in which the usual practices of historians are capable of illuminating comparative studies of education derive from historians' concern for evidence, especially including primary sources, which, for many historians of modern periods/issues, include oral sources. For historians, primary sources are those that are contemporaneous with, and have become generated in the course of, the events under investigation. For this reason, what can be termed "process sources" (e.g. eyewitness accounts, verbatim reports, agendas, correspondence, in-depth interviews) commonly receive greater attention than "product sources" (e.g. actual legislative acts, finished reports). Even with process sources, however, most modern historians seek to cross-check (or "triangulate") one set from a particular origin with one or more others from different origins. Moreover, primary sources of *information* become primary sources of *evidence* only once they are seen to help answer a specific, articulated question. More widespread adoption of such methodological rigour within the field of comparative education would at least reduce the number of descriptive, data-heavy, and ultimately pointless or misleading comparative education studies. Lack of clarity about purpose fuels comparisons dismissed by Cummings (1999, p. 43) as "senseless", including "those often used by international agencies, which report differences between aggregate statistical categories such as Asia, Africa, or Latin America ... [because] there is too much variation within these categories". At the other extreme, comparisons bloated with extrinsic purpose (e.g. to confirm a particular paradigmatic stance or explanatory theory) may exhibit intellectual and methodological flabbiness untypical of historians. This becomes

especially noticeable when such studies purvey anachronistic or, in other ways, inappropriate definitions and/or make only selective use of evidence.

Historians' inclinations to view their sources from different viewpoints in order to accommodate different possible interpretations, together with their readiness to juxtapose different sources, characteristically encourages them not only to accept the likelihood of multiple causation, but also to feel comfortable with the prospect of multiple interpretations. As Farrell (1986, p. 8) wrote about his own study:

There is no claim here for a uniquely valid interpretation of what happened in Chile between 1970–1973, nor do I believe that there is, or can be, one. But the existence of a variety of interpretations is a benefit, except perhaps to those whose understanding of social reality is so rigidly narrow-minded that they regard any deviation from received truth, as they understand it, to be heresy which is only to be extirpated.

It is for these reasons (among others) that historical judgements tend to be tentative and historians argumentative. These are qualities that some workers in the field of comparative education would do well to adopt, and they seem especially suitable to deal with what King (2000, p. 273) described as "the globalization of many uncertainties".

While revelling in tentativeness and argument, most historians are also interested in questions about the provenance, impact, longer-term seminality, and significance of events, movements or ideas. Many recognise that ostensibly clear statements about such matters which appear in official "product-sources" may prove to be inaccurate, unfair, and/or incomplete, making, for example, erroneous attributions of agency. This lesson would be salutary for some comparative education researchers, encouraging greater scepticism with regard to public relations-oriented pronouncements.

Similarly, in relation to causal analysis, historians are usually aware of the *post hoc ergo propter hoc* ("following x, therefore because of x") fallacy, though one cannot be quite so confident about the same awareness by some comparativists. Furthermore, many historians are suspicious of teleological explanations that depend on the assumption of some final end/grand intention. Again, comparative education researchers, seduced by conspiracy theories concerning, for example, colonial governments,

would benefit from a healthy dose of historical scepticism, as sharpened by particular (rather than overgeneralised) evidence.

A final characteristic of historical analysis to be discussed here is the predilection of many of the best modern historians to transcend pigeon-holes, to find connections between, say, accounts of developments in schooling with broader political, social, economic, religious and other cultural developments. In some cases, this recognition of connections is lacking in histories of education and comparative education studies. Thus, articles which include historical treatments of comparative education sometimes remain focused parochially on organisations, personalities and publications within the field of comparative education, omitting acknowledgement of the possibility that key developments in comparative education theory and methodology have been influenced by developments outside the field. These would include, for example, fashions in other academic fields, changes in the economy, lifestyle adaptations, technological innovations, political transformations, and even alterations in world view and attitudes to the other gender or children. A more widespread acknowledgement of this possibility and plausible identification of specific connections would, of course, be in keeping with Sadler's (1900) dictum about the importance of "the things outside schools". As noted earlier, it also permits the comparison of education times/calendars with different, possibly cross-influencing times/calendars.

Strategies for Comparing Times

It may help to identify two main sub-divisions of such strategies: appropriate units of comparison, and possible structures for comparing times.

Units of Comparison

From the outset of published works in comparative education, the main unit of comparison has been the nation-state (Nakajima 1916; Kandel 1933, p. xix; Crossley 2000, p. 322) and, as several commentators (e.g. Green 1997; Cowen 2000b, p. 336; Nóvoa & Yariv-Mashal 2003, p. 434) point out, it remains something like the default unit. On the other hand, in recent years, some researchers in comparative education (e.g. Bray & Thomas 1995; Sweeting 1999, p. 270; Hawkins & Rust 2001, p. 502) query the necessity and value of relying upon this default. The present book manifests the latter trend very clearly, showing as it does, that alternatives to the nation-state as the unit of comparison are not only locational (such as

continents, regions, cities, and districts), but may properly include such education-related entities as cultures, values, curricula, policies, organisations and ways of learning. Comparative studies may also focus on types of schools (e.g. grammar, vocational, international), individual schools, a whole range of communities (e.g. particular national minorities, Chinatowns), textbooks and/or other teaching/learning resources, and facilities for nonformal and informal education.

Structures for Comparing Times

Researchers utilise at least three different structural forms when seeking to compare times. These have been labelled *diachronic*, *synchronic*, and *quasi-synchronic* analyses (Sweeting 1993). The actual strategy adopted by a particular researcher depends, of course, at least partly on the nature of the subject. It also depends on the purpose(s) of the comparison, and on the researcher's personal preferences.

The first, diachronic analysis, is the most common – in histories of education, as well as in more general histories. Its main basis for organisation is chronological; thus, its main form is narrative. Typical examples include Aldrich (2002) and Farrell (1986). Metaphorically, such studies represent complete movies. The main advantage of this structure is its temporal clarity, which can emphasise both continuity and change, while offering a clear overview. Its main danger is that, if users seek to avoid the possible tedium of merely answering the typical story-listeners' questions ("and then?", "and then?") by inserting an element of "plot" or design, they may actually distort realities by over-rationalising and exaggerating past-people's capacity to foresee the future (or even see clearly their present). Another danger is that the requirements of narrative flow may conflict with a comprehensive perception of the different levels and aspects of education and tempt the writer to resort exclusively to a macro-view of educational developments and to focus only on top-down initiatives.

Synchronic analyses, sometimes associated with Structuralist thought, represent static snapshots. A classic study in English history is Namier's (1957) *The Structure of Politics at the Accession of George III*. In historical works focusing on education, scholars detailing particular legislation tend to adopt this sort of approach, as well as ones that juxtapose before/after situations (see e.g. Sweeting 1993, pp. 14–40). Theoretically, at least, the approach would also appear to be encouraged by Cowen's (2002b) focus on "moments of time". The advantage of this structure rests mainly in the

room it offers for detailed analysis and exposition. Its main danger, even when two contrasting times are juxtaposed for the sake of impact, is that occurrences in the intervening period become unjustifiably undervalued.

The third form, quasi-synchronic or quasi-diachronic, encompasses a whole range of hybrids, especially those types of case studies that address policy episodes (e.g. Cheng 1987; Sze 1990). Metaphorically, they are closer to home movies or brief television programmes. The advantage of these hybrid structures is that they are capable of combining the virtues of the two, more extreme, forms – offering some sense of continuity as well as the opportunity for case-study type detail. The main danger lies in the patchiness of coverage they provide and the likelihood that significant aspects of educational development will be omitted.

Problems When Comparing Times

It would be unrealistic and unhelpful to end this chapter without addressing the sorts of problems that arise in attempts to compare times. These form themselves into three clusters.

Problems of Sources

Access to sources (especially government archives) is, at times, problematic. Persistence often pays off, however, as do efforts to retrieve alternatives. Much the same may be said about the *incompleteness* of some sources. Again, alternatives and supplements (often from oral evidence) may serve the particular purpose. Relatively inexperienced researchers would also do well to consider carefully the *nature* and, especially, the *variety* of the sources they use, ensuring that they are not too easily satisfied with the obvious (usually official and documentary) sources, but are also ready to incorporate oral, pictorial, statistical and even personal sources. In this way, they are more likely to tackle effectively problems involving the *reliability* of evidence, especially via triangulation methods. They can also provide alternatives to seemingly endless screeds of text, likely to be welcomed by readers.

Problems of Interpretation

These problems may be reduced through the triangulation of evidence, which is likely to provoke several different possible interpretations. Some, more specific interpretative problems involve the establishment of *provenance*.

In these, as noted earlier, it is usually important at least to recognise that the official or conventional attribution of the origins of an idea or decision is not necessarily a full or even an accurate statement. Much the same is the case with judgements of *responsibility* or *agency*, as far as the formulation of, say, a policy is concerned, and with judgements of *potency*, as far as policy implementation is concerned. Frequently, for example, a commission, council or committee that has in actuality done nothing but “rubber stamp” a proposal receives credit for its creation. Similarly, official reports of widespread implementation of a particular, centre-endorsed policy need to be interpreted as self-serving until and unless compared with evidence about actual implementation practices at the periphery. Interpretation of the *significance* of formal declarations of *intentions* and *objectives* also benefits from caution and, especially, the recognition that the apparently “logical” sequence of purpose-process-product is, in practice, often manifested chronologically in a different way, especially when the processes are piloted, the products evaluated, and the purposes retrospectively rationalised (Sweeting 2002). In other respects, interpretations of significance, like those of provenance, are aided by the use and triangulation of a range of sources. In all these cases, it is worth emphasising that history-focused commentators should use and not abuse their privilege of hindsight. Thus, researchers in comparative education need to be wary of the “presentism” that seems to have regained acceptability in currently fashionable poststructuralist and postmodernist discourse (Lorringer 1996; Nóvoa & Yariv-Mashal 2003, p. 430).

Problems of Periodisation

Periods, whether they are linked directly to time words (“the 20th century”, “the 1960s”), indirectly (“The Victorian Age”, “Postwar Reconstruction”, “The Thatcher Years”), or only implicitly (“Retraction”, “The Rise of Neo-liberalism and New Managerialism”) are artificial inventions (King 2000, p. 267) and are used by historians and others as convenient forms of synthesis. When writers invent their own period titles, they are seeking to encapsulate meaning, often via the process of colligation, and thus to transform a “story” into the elements of a “plot” (Forster 1953) or identifiable themes.

Problems associated with periodisation include the selection of *beginning dates* and *end dates*, decisions about *optimal duration*, and, for the historian of education, *links with other histories* – broader social, economic, political, regional, world histories, for example, data and insights that are

exogenous, as well as *endogenous*, to education and/or the specific unit of comparison under investigation (Phillips 1994, 2002). The author's own work on education in Hong Kong has included notions of periods borrowed from historians' terminology. In some cases (Sweeting 1998a, 1998b, 1999), for example, he felt it helpful to consider successive developments in university-level teacher education as:

- "Pre-history" (pre-1917, when the first University department was established)
- "Ancient History" (1917–1941, a time characterised by one full-time member of staff, assisted by a school-based "master of method")
- "the Dark Ages" (late 1941–1951, from the Japanese invasion and closure of the University to the provisions to reopen the Department)
- "the Renaissance" (1951–c.1976, from the rebirth of the Department up to the time it gained its independence from the Faculty of Arts)
- "Modern Times" (c.1976–c.1998, with its higher technology and including Chaplinesque connotations)

A later publication (Sweeting 2004) used period-notions that were less open to criticism as being Eurocentric. After consideration of the advantages and disadvantages of long and short periods for a study of educational developments in Hong Kong 1941–2001, the following periodisation was used:

- Occupational Hazards (and "therapy?") 1941–1945
- Reconstruction, Expansion, and Transformation 1945–1964
- Policy, Pressure Groups, and Papers – on the way to Mass Access 1965–1984
- Planning for a More Certain Future 1985–1997
- A More Certain Future – the Pleasures and Perils of Postcolonialism 1997 to the New Millennium

Whatever the virtues and/or vices of the phraseology used, all periods, apart from the first and last ones, do at least have the virtue of similar duration and of being marked at beginning and end by highly significant dates. In some (especially the second, third and fourth), the basic grounds for periodisation were predominantly education-centred; in the first and last, the reasons were linked with broader matters, in which education

was inevitably also involved. These examples apply to multiple aspects of education in a single society, studied over a relatively long period of time.

There are challenges and satisfactions involved, too, in the comparison of developmental periods in different places, as Phillips demonstrates in the cases of post-war Germany and England (Phillips 1994, p. 270; 2002, pp. 372–374). And this may serve to reinforce an understanding that comparison is involved in much of the historian's work. This is especially true with regard to colligation, the creation of coherent sequences, argument about alternative explanations/interpretations, and, as far as historians of education are concerned, the consideration of different levels or aspects of education.

Conclusions

With comparative education, as with almost all other activities, much depends upon purpose. If the purpose of the comparison is merely measurement, then comparing times may seem marginal – although, even in these cases, estimates of, say, rates of progress/decay over time could be rewardingly compared. When, however, the purposes of comparison include the identification of discrete phases of educational development, then comparing times is an integral part of the process.

Further explorations of comparing times could focus on the *comparing of important times* (emphasising especially, perhaps, Cowen's concept of transitologies) and the *timeliness of comparing importances* (possibly as an antidote to some poststructuralist, postmodernist, and often globalisation-heavy caricatures of educational systems). Both foci acquire a special pointedness in situations where reform initiatives are characteristically a-historical in approach. Thus, a deliberately historical-comparative perspective provides a much-needed corrective. And more generally, in these and probably other ways, History's positive values of recognising the human and the humanistic (Kazamias 2001, p. 447), reinforcing the crucial role of context (Crossley 2000, p. 233), and offering alternatives to "macro-mania" (Sweeting 1989) may fertilise the field of comparative education. Such an outcome is the ultimate justification of the *importance of comparing times*.

Comparing Cultures

Mark MASON

"Were the British truly imperialist?" asked the respected travel writer, Jan Morris (2005, p. 24). Does "The Chinese Learner" (Watkins & Biggs 1996) "invariably have a high regard for education"? Are "Asian students not only diligent, but also [possessed of] high achievement motivation"? (Lee 1996, p. 25). Do Finnish students enjoy some cultural advantage that enabled them to top the league tables produced by the 2000 Programme for International Student Assessment (PISA) administered by the Organisation for Economic Co-operation and Development? (Väljörvi 2002). Was it appropriate for South Africa's 1951 Eiselen Commission to state that "education practice must recognise that it has to deal with a Bantu child, trained and conditioned in Bantu culture, endowed with a knowledge of a Bantu language and imbued with values, interests and behaviour patterns learned at the knee of a Bantu mother"? (Kallaway 1984, p. 175). And was it valid then to declare, as did Hendrik Verwoerd, Minister of Native Affairs in 1954, that "there is no place for [the Bantu] in the European community above the level of certain forms of labour" (Kallaway 1984, p. 173)?

Few would deny that cultural factors are indeed associated with and influence many aspects of education. Alexander (2000, pp. 29–30) went so far as to say:

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.

When comparing one culture with another, however, researchers should tread with caution. They face possible accusations of stereotyping, of treating culture as monolithic, and of overstating its influence in a hybrid world characterised by complex interactions and influences. Morris' (2005, p. 24) response to her own question whether the British were truly imperialist was that

some were, some weren't. It depended on class, age, temperament, religion, the state of the nation, the state of one's investments, the state of one's liver and all the myriad other factors that make national consensus about anything a nonsensical hypothesis.

In his chapter in the book entitled *The Chinese Learner*, Lee (1996) cited the claims of Ho (1986) and Yang (1986) about the diligence, motivation and high regard for education apparently typical of Chinese, and more generally, Asian students. Many who have taught in societies characterised by what Ho (1991) has called "Confucian heritage culture" have reported similar perceptions. How valid are these characterisations, and are the features unique to students in Confucian heritage cultures? Lee cautioned readers about the difficulties involved, which include the danger of overgeneralising. He adds in Chapter 8 of the present book:

Whenever values are discussed collectively, they have to be examined in the context of individual choices of values. Likewise, whenever values are focused on individuals, they are never separable from the society at large.

Morris might add that any individual's values may also reflect the state of that person's liver – not, after all, particularly solid ground for generalisation to the level of culture.

Concerning the performance of Finland's school children in the 2000 PISA study, Välijärvi (2002, p. 45) stated that cultural influences were a significant element. One component, he suggested, was cultural homogeneity: "it has been comparatively easy in Finland to reach mutual understanding on national education policy and the means for developing the education system". Välijärvi also referred to students' engagement in reading, and cultural communication between parents and children; and he cited a great cultural emphasis in Finland on equal opportunity in education.

In related vein, Linnakylä's (2002) interpretation of the excellent performance of Finland's school children inferred that Finnish children in general have through centuries of cultural tradition long respected the ability to read. This is possibly because after the Reformation in northern Europe it became increasingly acceptable and important for parents to read the Bible to their children (as opposed to the previously dominant Catholic practice that reserved the reading of the Bible for the priesthood). Since the 16th century in Finland, then part of Sweden, literacy had been a prerequisite for receiving the sacraments and contracting a Christian marriage. Children's reading skills were publicly assessed in the annual "kinkerit", in which failure meant public disgrace and the denial of permission to marry (Linnakylä 2002, pp. 83–85). Given what we now know of the relationship between levels of parental education and the educational achievements of their children, it does not take a social Darwinian perspective (see Dickens 2000) to realize the effect over centuries of a cultural practice that has meant that almost all children in Finland have been raised in families where both parents are literate.

The fourth and last question with which I raised some difficulties associated with generalisation at the level of culture contrasts sharply with the Finnish example. Were black South African school children at such a cultural disadvantage "at the knee of a Bantu mother" that the education of the black South African was to be restricted "on the grounds that (a) it makes him lazy and unfit for manual work; (b) it makes him 'cheeky' and less docile as a servant; and (c) it estranges him from his own people and often leads him to despise his own culture", as was reported by the 1936 Interdepartmental Committee on Native Education (Rose & Tunmer 1975, p. 232).

Morris' caution that there are a "myriad factors that make national consensus about anything a nonsensical hypothesis" must be taken seriously. However – and apart from the transparently racist attitudes that served the economic and political interests of the elite in Apartheid South Africa – many educational researchers would acknowledge substantial degrees of truth in the examples taken from Confucian heritage cultures and from Finnish culture. As I noted earlier, few would deny that cultural factors indeed influence many aspects of education; but most would flinch from asserting precisely what these factors are. Such factors are notoriously difficult to isolate, and such assertions are often tenuous at best, given how easy it is not only to overstate the influence of a particular culture in a complex world, but also to get it wrong. Perhaps worse than

this, researchers who attempt to describe the influence of cultural factors on education face accusations of stereotyping, even of racism. While *The Chinese Learner* (Watkins & Biggs 1996) and *Teaching the Chinese Learner* (Watkins & Biggs 2001) are respected volumes in the field of culture and pedagogy, publication of volumes entitled “The Black African Learner” and “Teaching the Black African Learner” would be scorned as racist. While the former two titles are not, in that they attempt to uncover the reasons behind the remarkable educational achievement of students in Confucian heritage cultures (which are also paradoxical, given educational policies, pedagogies and learning styles), the latter two would be typical of the literature justifying colonial and Apartheid education in South Africa: as if there were some phenomenon reducible to “the black African learner”.

Bearing in mind such considerations, this chapter considers some philosophical and methodological challenges that face researchers who attempt to compare education across cultures. The two core sections respond to historical, philosophical, anthropological and sociological questions associated with the definition of culture, and to methodological questions associated with research across cultures. I attempt to 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, Stuart Hall and Geert Hofstede. The methodological questions associated with cross-cultural educational research are addressed by reference to the work of Robert Levine, Joseph Tobin, Robin Alexander and Vandra Masemann. Through careful consideration of the notion of culture and of its consequences, and by discussion of the more helpful methodological approaches to this domain, my aim is to contribute to further conceptual clarity and methodological rigour.

Robust inferences from comparative studies would depend on comparison between entities that are both identifiable and discrete. If it is from comparison between two cultures that researchers wish to draw robust conclusions, they should be able at least to identify each culture, and to be sure about what marks each as distinct from the other. If they wish to claim, for example, that “Chinese learners invariably have a high regard for education”, they should bear in mind that a claim as strongly put as this implies that *all* members of this group display this feature. The statement also implies that this feature is an *essential* attribute of the

members of this group, and in turn that a high regard for education is a *necessary* condition for membership of the group described as Chinese.

Attention to this level of definitional constraint in comparative education research across cultures would increase 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 International Association for the Evaluation of Educational Achievement (IEA) and PISA. 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 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 realised. Questions about the validity and reliability of anthropological perspectives on educational comparison across cultures underlie much of the discussion in this chapter – that is, at least about the more outdated anthropological approaches that still seem to influence much comparative educational research across cultures. In a world where cultural isolation as per the mythic tribes of Borneo is increasingly impossible, some of these more outdated anthropological notions of culture might not serve as well in comparative research across cultures as other perspectives on culture might. One of the more important recent pieces in the field is Masemann’s (2003) chapter. Masemann’s perspective is anthropological, and I shall consider it in more depth later. For now it would be fair to set down that I argue in this chapter that it is to sociological understandings of the concept of culture that researchers should turn for a more appropriate construction of culture in all its complexity in a world characterised by increasing degrees of plurality, multiculturalism, interdependence, hybridity and complexity.

Defining and Describing Cultures

The first major question, then, is about the very nature of culture. What is it, how can it be recognised, what are its consequences, and how is its influence expressed?

Raymond Williams, acknowledged as one of the greatest theorists of culture (see e.g. Williams 1981, 1982), has asserted (1985, p. 87) that “culture is one of the two or three most complicated words in the English language”. This is “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”.

A Genealogy of Culture

In its early uses, culture was “a noun of process: the tending of something, basically crops or animals” (Williams 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’ “a culture of their minds” (1651). Habituation to and generalisation of the metaphor contributed to the development of the term as an independent noun, “an abstract process or the product of such a process” (Williams 1985, p. 88), but it was not common in the English language until the middle of the 19th century. While the “cultivation of the self” is especially familiar as a concept and value to scholars of Confucian heritage, Williams pointed out that in 18th century England, “cultivation” and “cultivated” acquired class associations.

German borrowed the French *Cultur*, spelling it *Kultur* and keeping its close association in French with *civilisation*, both in the sense of the process of becoming civilised or cultivated, and in the Enlightenment sense which described “the secular process of human development” (Williams 1985, p. 89). Critically, both for the purposes of this chapter and as far as the historical development of the term is concerned, the late 18th century work of the German philosopher Herder challenged the Enlightenment notion of a universal human development. Herder (cited by Williams, 1985, p. 89) was scathing of “the very thought of a superior European culture”, calling it “a blatant insult to the majesty of Nature”. In this and in his rejection of the notion of a progressive and universal path of human development, Herder prefigured the late 20th 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. This use of “cultures” in the plural was, according to Williams (1985, p. 89), 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”. And at the same time, surely, was the impetus to compare between and among them born.

In addition to 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* (1843–52) and Tylor’s *Primitive Culture* (1870). In these works, culture is commonly an independent noun, whether used generally or specifically, which indicates a particular way of life, of a people, a period, a group, or humanity in general. But, Williams observes (1985, p. 90), “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”. This third sense is 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 the relationship of human beings to work.

Most attempts to define a “true”, “proper” or “scientific” sense of the term have taken its use in North American anthropology as the norm. This is somewhat arbitrary, and this arbitrariness lies partly behind my defence of the use of contemporary sociological perspectives in comparing education across cultures, in preference to Masemann’s (North American) anthropological perspective. Working towards an understanding of culture for comparative purposes, it is important to note Williams’ (1985, p. 91) remark 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.

Comparison of education across cultures cannot avoid the study of both material production and of symbolic systems. The curriculum is a good

example of both material artefact and symbolic system, as are education policies, and pedagogical materials.

The field of symbolic (as opposed to cultural) anthropology has its primary focus on signifying systems (as in cultural studies). A key text is Wagner's (1981) *The Invention of Culture*, which stresses that culture is not a fixed entity that shapes the lives of the individuals. 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. Consider, for example, the different meanings associated with the terms denoting one who learns, each associated with a different set of values and each connoting a different role for the learner as cultural perceptions of learners change over time and across contexts: pupil, schoolboy, school-girl, trainee, apprentice, disciple, follower, scholar, critic, student, lifelong learner. 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.

In summary, this discussion leads to two definitions of culture that are of most interest to social scientists. The first, commonly understood as the anthropological definition, indicates "a particular way of life, whether of a people, a period, a group, or humanity in general" (Williams 1985, p. 90). This way of life would include the shared values and meanings common to members of the group. 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, pp. 116–117) 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.

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 artefacts, and more importantly "the set of practices by which meanings are produced and exchanged within a group" (Bocock 1992, p. 233). At the heart of these practices lies language, because the sharing of a common language system enables people to communicate meaningfully with one another. 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 *symbolisation* which enables us to communicate meaningfully about the world" (Bocock 1992, p. 233).

These sign and symbol systems are most commonly understood as the words of a language, but they also include material objects. 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, function as "signs" in that they express meaning.

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" (Bocock 1992, p. 235): hence the term "structuralism".

"National Culture" in Modern Societies

Perhaps the most common expression of cultural identity in modernity is found in what is widely understood as "national culture". In pre-modern societies, cultural identity is typically constructed in terms of one's tribe, religion or region. With the nation-state the dominant political entity in modernity, these identities have in modern societies gradually given way to national cultural identity. "Nation" (as in national, associated with a country) and "culture" are, after all, often conflated in comparative education research that attempts to identify the cultural factors that might have contributed to, say, Finland's PISA success in 2000. The question then turns to the meaning of national culture.

Here I follow 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 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; but before comparative education researchers undertake comparisons across cultures, they should consider not only the ways in which the discourse of national culture is represented, but also the power of those representations to win national allegiance and to define cultural identity. 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). 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, Foucault argued that the modern subject has not escaped the consequences of power and authority. Power runs everywhere, even 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.

This discussion focuses on national culture and identity because this concept has been of particular interest to comparative education researchers. There are, however, many other cultural identities. The

so-called “fragmented and de-centred subject” of late modernity is constituted by many cultural identities and is the subject of (in both senses of the phrase) many cultural discourses. As a consequence of the processes associated with globalisation, 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, pp. 292–293) 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.... 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. (emphasis original)

National culture emerged with and helped to shape modernity by gradually displacing (but of course not entirely) the pre-modern discourses of identity mentioned earlier: tribal, ethnic, religious and 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. National culture was also promoted by museums, performing arts theatres, architectural icons such as palaces, castles and parliamentary buildings, and latterly, national sports teams and consumer brands marketed with national identities.

What are the origins of these representations that constitute and reflect the discourse of national culture? The narrative of national culture may be constructed through

- “[T]he 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)

- 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)
- 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 and sometimes invented
- 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 & Ranger 1983, p. 1)
- 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 caution 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, it should be realised that the "unit" of culture is one of the most difficult to identify and operationally describe. Certainly cultural identity is important and has real consequences; but inferentially locating the source of the significance of these consequences in culture is 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". The answer is that they are obviously not. As Hall (1994, p. 297) pointed out, "modern nations 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 a brave researcher indeed who attempts to compare, say, South African cultural approaches to learning with Nigerian, Indonesian or Chinese ones.

I have argued that "national culture" is somewhat arbitrary, probably best understood as myth, and not particularly successful at masking deep and cross-cutting social divisions. The process of globalisation has complicated matters even further. I turn now to the consequences of globalisation and its associated processes for national cultural identity. In a rather mixed geological metaphor, globalisation has marbled what has been sedimented and 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 globalisation. One of these involves the mass "unplanned" migration, driven by the increasing gap in wealth between rich and poor that is arguably the most stark of globalisation's consequences, of people from the previously colonised countries of the less developed world to the countries of the more 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 rice. 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, globalisation is associated with, in part, a more universalist and deterritorialised form of identity.

For Waters (1995, p. 3) globalisation is "a social process in which the constraints of geography on social and cultural arrangements recede and

in which people become increasingly aware that they are receding". It is about, in Delanty's (2000, p. 81) version, the diminishing importance of geographical constraints in defining the nature of economic, political, social and cultural interactions; in other words, about the transformation of space or, more specifically, the "deterritorialization of space". Cultures and civilisations are thus 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, as a consequence of the diminishing limits of geography. However, globalisation by no means leads necessarily to a global society, or even to a global culture, other than perhaps the rule of the market and its orientation towards global elites as a consequence of the transnationalisation of capitalism. Much of the literature points to increasing diversity and fragmentation as well as to increasing homogeneity.

Tendencies towards diversity and fragmentation are evident in, for example, Al Qaeda's rejection of Western consumer society and assertion of Islamic identity and culture. This fragmentation and emphasis on particular, local cultural identity is also evident in the resurgent expressions of nationalism that have been seen in central and eastern Europe since the late 1980s: typically, the Estonian, Latvian, Georgian, Kazakh, Uzbek and Tajik nationalisms (to name but a few) that contributed to the break-up of the Soviet Union; or, the expression of Slovenian, Croatian, Bosnian, and Serbian nationalism that contributed to the break-up of Yugoslavia. These struggles to assert a national cultural identity exemplified a search for an "ethnically pure" heritage that had been "lost", its most succinct and horrifying expression in the term synonymous with the recent Balkan wars, "ethnic cleansing". In Bauman's (1990, p. 167) words:

[T]he "resurgence of ethnicity" ... puts in the forefront the unanticipated flourishing of ethnic loyalties inside national minorities. ... Ethnicity has become one of the many categories or tokens, or "tribal poles" around which ... communities are formed and in reference to which individual identities are constructed and asserted.

Examples of the homogenisation of culture are most evident in consumer culture, where (mostly) young people tend to define their identity – or at least a significant part of it – and "lifestyle" in terms of shopping malls, Western-style jeans and T-shirts, Nike athletic shoes, McDonald's fast-food outlets, Starbucks coffee shops, and so on. The exploitation of just about everything that can be repackaged or processed

and sold for a profit by means of “adding value”, in the process known as commodification, has contributed substantially to this homogenisation of culture to an identity driven by consumerism and defined primarily in terms of choices made in the market place, or more specifically in the shopping mall. As Hall (1994, p. 303) puts it:

[T]he more social life becomes mediated by the global marketing of styles, places and images, by international travel, and by globally networked media images and communications systems, the more identities become detached – disembedded – from specific times, places, histories, and traditions, and appear “free-floating”. We are confronted by a range of different identities, each appealing to us, or rather to different parts of ourselves, from which it seems possible to choose. It is the spread of consumerism, whether as reality or dream, which has contributed to this “cultural supermarket” effect.

Nevertheless, the consequences of globalisation are very unevenly distributed. Defenders of the anthropological view of culture might point out that the consumer cultures of the USA and Japan are felt more strongly in Mexico and Hong Kong than they are in Bhutan or Myanmar. To use Wallerstein’s (1974) terms, it is the cultural production of the “Western” centre (including, of course, Japanese cultural capital) that dominates that of the periphery, and it is in the centre that the choice of identity with any number of “cosmopolitan” or particular hybridities is indeed an option.

Of most interest for the purposes of this chapter are three processes associated with globalisation: 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 globalisation; 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. It is perhaps to cultural studies and to sociological more than anthropological understandings of culture in contemporary society that researchers need to turn for comparison of education across cultures.

At the same time, I add a word of caution: for all that I have said about the virtual impossibility of talking about a “culture” any more, I have little choice but 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”. I have tried where stylistically appropriate in what follows to use “society” to escape the false and falsely packaged baggage that comes with “culture”. At the same time, I am well aware of the slippage from “culture” to “society”.

Comparing Education across Cultures

The second major question has to do with how researchers might set about comparing education across cultures. How, in short, can the particular influences of culture be isolated in attempts 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 comparative education 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? Hammersley (2006, p. 6) 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?
- How are we to gain the knowledge we need about that context?

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 globalisation in rendering 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 “globalised cultural context” is to ignore ways in which, as indicated above, local and particular identities have been strengthened in resistance to the processes of globalisation. Perhaps more importantly, it is also to abandon the search for truths about the consequences of culture for education that are both evident to many and productive of interesting insights.

With reference to his first question, Hammersley (2006, p. 6) asked 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". I have argued 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 (p. 6) pointed 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". 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" (p. 6), 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".

The examples I used at the start of this chapter included a reference to 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, ethnographic research typically focuses on local and surface events that are merely symptomatic of deeper and more powerful structural forces, especially economic and political factors. 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 globalisation.

With reference to the second question about how researchers can gain the knowledge they need about the wider context, Hammersley (2006, pp. 6–7) wondered 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. He cautioned 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 other) 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 axis 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 avoids the assumptions of neutrality and objectivity of functionalist and positivist approaches, she suggested (p. 115) 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.

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 (p. 120) drew 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.

I add here that it would be a mistake for 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. 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. Perhaps researchers cannot get away from what Hammersley (2006, p. 11) saw 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". Dealing with this tension methodologically is one of the challenges faced in this chapter, and one to which I shall shortly turn my attention.

An associated risk lies in the potential failure by researchers to recognise their own ethnocentric perspectives. It is not only that instruments need to be developed cross-culturally. Wagner (1981, pp. 2–4) cautioned in his book *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 (emphasis added). 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 [sic] 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. (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 (emphasis original), to realise 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. (p. 4)

Researchers should also be mindful of their own ethical and more broadly axiological (value) 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 also 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. Translation of instruments and from transcriptions adds another level of complexity to this question. Back-translation is one way to check the accuracy and equivalence of translations.

Hofstede's (2001) book, *Cultures Consequences*, is another landmark in the field of comparison across cultures, and few discussions of the field can be complete without reference to it. Hofstede examined differences in cultures among samples of employees of a large multinational corporation, IBM, in its offices in over 50 countries around the world. He considered cultural differences in terms of "five independent dimensions of national culture, each rooted in a basic problem with which all societies have to cope" (p. 29):

- *Power distance*, the extent to which the less powerful members of a culture accept and expect that power is distributed unequally, involving the degree of human inequality that underlies the functioning of each particular society
- *Uncertainty avoidance*, which has to do with levels of stress displayed by members of a society in the face of uncertainty
- *Individualism versus collectivism*, which describes the relationship between the individual and the collectivity that prevails in a given society
- *Masculinity versus femininity*, which has to do with the implications that biological differences between the sexes have for the emotional and social roles in a particular society
- *Long versus short-term orientation*, which is related to the choice of focus for people's efforts: the future or the present

Whether these five dimensions do indeed provide useful windows into culture's consequences, whether there are other dimensions conceptually and statistically independent from these five, and whether other and more finely focused lenses might be of greater use to educational researchers are questions of less interest here than Hofstede's methodology. One criticism has been of the use of nations as a unit of analysis for studying cultures, and Hofstede himself admitted (2001, p. 23) that "modern nations are too complex and subculturally heterogeneous for their cultures to be [described] ... on the basis of [inductive inferences from] small samples studied in great depth", that being the methodological

approach associated with much classical anthropological study. Jacob (2005, p. 515) agreed, pointing out that

cultural diversity can exist intranationally or within a single country, as well as across nations. Most significant studies have postulated typologies which treat countries as homogeneous cultural entities. ... Since there is no such thing as cultural purity, what needs to be emphasized is that countries have different cultural mixes and people tend to be “hybrids” who simultaneously hold membership in different cultural groups.

Not only is intra-cultural variation commonly greater than inter-cultural variation: there exist also trans-cultural universals, such as “that considerate leaders find greater acceptance than not-so-considerate leaders irrespective of culture” (Jacob 2005, p. 516). If intra-cultural variation is so often greater than inter-cultural variation, and if trans-cultural universals threaten to make nonsense of cultural differences from the other direction, one has to wonder whether analysis at the level of culture is of any worth at all. My response, in defence of which I argue here, is that comparative analysis across cultures *can* reveal truths about cultural differences in education, if done sensitively and carefully.

What, then, are the possible methodological errors in attempting to replicate his study against which Hofstede himself warned? “Confusing cultures with individuals”, he cautioned, “is the first pitfall of cross-cultural research, especially tempting to psychologists from individualist countries” (2001, p. 463). Cultures, Hofstede also remarked (p. 17) “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”. Importantly with reference to earlier discussions, Hofstede (p. 464) warned against confusing national culture with other levels of culture, such as ethnic or regional cultures. 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 states explicitly elsewhere in this volume, defining and refining the unit of analysis is critical. It is possibly even more so in the notoriously intractable domain of culture.

Hofstede (2001, p. 20) suggested that, methodologically, a multidisciplinary approach is most appropriate for comparisons across cultures, for the simple reason that

at the level of (national) cultures, phenomena on all levels (individuals, groups, organizations, society as a whole) and phenomena related to different aspects (organization, polity, exchange) are potentially relevant. Crossing disciplines is essential.

At the risk of sounding trite, researchers in the field of comparative education are probably well suited for undertaking comparisons of education across cultures precisely because comparative education is more a field than a discipline: researchers in the field are often relatively comfortable with study that is informed by more than one disciplinary perspective. Perhaps comparative education research across cultures is best undertaken by teams of researchers who among them can draw on a range of disciplinary and field perspectives that include among others those from philosophy, history, geography, economics, political science, social theory, sociology, anthropology, cultural studies, psychology, theology, linguistics and educational studies.

Methodological Approaches to Comparing Education Across Cultures

In his book, *Culture and Pedagogy*, 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). 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” (p. 4). In doing so, he realised that researchers on countries and cultures other than their own commonly become acutely aware of how little they know, and that “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. He collected data at three levels: the system, the school and the classroom. He used a mixture of interviews, semi-systematic observation and, for later transcription and analysis, videotape and audiotape. He supplemented these with school and country documentation, photographs and daily journal entries.

Alexander made an interesting point about how the number of cultures, or countries, selected for study can influence the nature of the conclusions. Addressing the question why he chose five countries rather than just two or three, he stated (p. 44):

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.

Also relevant to this discussion are LeVine's (1966) observations about the use of outsiders' judgements in culture studies. LeVine highlighted 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 was to enhance validity by this method of triangulation. Tobin et al. (1989) used LeVine's ideas in their study of preschools in Japan, China and the USA. They set out to study preschools in the three cultures represented by the countries, but also the three cultures as seen through their preschools. Following LeVine, they sought a "multivocal ethnography" (1989, p. 4) in order to enhance by triangulation the validity of their conclusions about preschools in those three countries. This multi-vocal ethnography included (pp. 4–5):

[T]he 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.

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 [the researchers] had come to the field hoping to film and what [their] hosts felt was important and appropriate for [them] to see”. In this, the researchers noted (1989, p. 5) 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. pointed 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 realised after their recording that when American members of their team were filming, they tended to focus more on individual students in the classroom. By contrast, Chinese researchers tended in their filming to pan across large groups of students. The result, Tobin et al. they acknowledged (p. 7), was “three videotapes that are very subjective, idiosyncratic, culture-bound”.

Following their filming of three preschools in three cultures (which constituted the record of their primary outsiders’ observations as ethnographic researchers), Tobin et al. sought a second narrative to lend perspective to their first, filmed, narrative. These were insiders’ explanations: “Japanese, Chinese, and American preschool administrators’, teachers’, parents’ [and children’s] explanations of and reactions to the videotapes [the researchers] shot in their schools” (p. 7). Audiences were asked to view the tapes of their preschools and to provide running commentaries – in the sense of both a narrative and an analysis – of the 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. They asked other audiences associated with preschools in the same country how representative this preschool was of others in their society, and how atypical it was. 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?" (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, contextualised and provided a further perspective on the first narratives of the researchers, to whom we might refer as the primary outsiders, and on the second narratives, of the primary insiders. This strategy gave the 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 particular societies.

With respect to this problem of typicality, Alexander located the strength of Tobin et al.'s methodology 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 preschool in Japan, Alexander stressed that what their method enabled them to do was to establish the *authenticity* of the observed practices as *distinctive* (and indeed typical) of preschools 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. Alexander (2000, p. 267) added:

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.

Approaching the problem of typicality by rendering a particular case *insightful* depended, stated Alexander (p. 266), 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.

Alexander's second proposition, so ably demonstrated both in his study and in that by Tobin et al., 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" (2000, p. 266). Key strengths of the conceptualisation of the studies by Tobin et al. and Alexander lie in the ability of their methodological approaches to render inferences about what cultural values, ideas and experiences lie beneath observed practices, because of their acceptance that culture is an integral part of, rather than an extraneous factor contributing to, what goes on in schools and classrooms.

Following LeVine's (1966) ideas on "outsiders' judgements", 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. Their responses as secondary outsiders to the videotapes of preschools in the two other societies were 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 researchers 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 above, then researchers should look closely at the language used by teachers, pupils, administrators, parents, and so on. In his own study, Alexander (2000, p. 427) 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".

The fourth narrative perspectives of the secondary outsider participants in the study by Tobin et al. of course 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 permit the researchers to turn, 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, p. 9) 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.

Comparative educational research across cultures 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 cultures under study, and *from* the cultural perspectives of the researchers. The study by Tobin et al. succeeds in the best of both senses, and that was indeed their aim in undertaking it. In this regard they cited 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 the design of their studies researchers should also bear in mind the objective of comparing across cultures only what is comparable. Researchers should avoid comparing, for example, preschools in China with preschools in Gibraltar. Tobin et al. tried to record comparable situations,

with children of comparable ages, in comparable institutions, in three different societies, but acknowledged that “comparability across cultures can only be approximate at best” (1989, p. 7). In their attempts to record at least one fight between children in each culture, and to record at least one instance of a child being disciplined by a teacher, they had to conclude that what constitutes fighting, or teacher discipline – in other words, the very definitions of the meanings of these actions – varied substantially across cultures.

Conclusion: Values and Interests in Comparing Education Across Cultures

The previous section on methodological issues in comparing education across cultures focused quite substantially on ethnographic issues and research methods. In this conclusion, it is appropriate to consider some serious concerns about ethnography as a method of research. Tobin et al. (1989, p. 9) summarised some of them as follows:

Ethnography as a method of research and a mode of representation is vulnerable to the accusation of being static, ahistorical, ideal-typical, and conservative in its reification of the status quo. Ethnography tends to find order, function, and symmetry in institutions while missing conflict and dysfunction; ethnography highlights ritual, belief, and ethos while giving less attention to the issues of social class, politics, and power.

Hammersley (2006, p. 5) similarly pointed to ways in which “the shortness of much contemporary [ethnographic] fieldwork can encourage a rather ahistorical perspective, one which neglects the local and wider history of the institution being studied”. This of course raises problems of sampling: how can researchers be sure that the temporal slice that they have selected is indeed representative of cultural patterns in the longer term? Following this are the obvious questions about the extent to which generalisation is possible.

In this regard, Tobin et al. admit that their videotapes, “like other ethnographic narratives, freeze people and institutions in time and isolate them from their larger contexts”, to the extent that their narratives, despite their being constituted by primary and secondary outsiders’ and insiders’ perspectives, “remain at risk of being essentially timeless and contextless”. Aware of these risks, they introduced into their study what

they call “a sense of time, place, and social class” (1989, p. 10). With respect to the historical context of their study, Tobin et al. situated their research in China five years after that country’s introduction of a one-child policy, when educators and parents would have been considering how best to socialise this new generation of children growing up without siblings. In similar vein they took account of the spatial and geographical context of the schools that they studied, and also of the class context. To a less apparent extent, Tobin et al. situate their study with respect to gender issues (see, for example, the discussion of the role of American mothers inside and outside the home [pp. 179–182]), and far less so with respect to issues of race and ethnicity.

Tobin et al. acknowledged that they had “tried to privilege those contexts that insiders in each culture see as being most important” (1989, p. 10). This is in my view both a strength and a shortcoming of their approach. It is a strength because it takes seriously the perspectives of cultural insiders. But it is a shortcoming because many insiders may prioritise and interpret those aspects of their cultural context in a benignly functionalist manner – that is, where they view the agents and institutions of their society as engaged in essentially a cooperative endeavour to the good of all, and where the social arrangements of their society are ultimately oriented to this end. Researchers asking many white South Africans about the economic, political, social and cultural arrangements of Apartheid society could well have received a conservative functionalist response to the effect that institutions of Apartheid contributed most effectively to peaceful “separate development” of the different racial groups in the society, given the legacy inherited from nearly three centuries of colonialism. Researchers may thus miss insiders whose perspectives are grounded in conflict or critical theory, where the agents and institutions of society are understood to be in conflict with each other over limited resources, and the economic, political, social and cultural institutions are so arranged as to serve the interests and preserve the wealth and power of the privileged groups in that society.

My own view here, as indicated earlier, is that researchers cannot observe another society or culture a-theoretically, with the apparent aim, as is espoused by much of the methodological literature in ethnography, of generating hypotheses inductively from “a-theoretical” empirical observation. What we see, and what we do not see, is a consequence of our implicit theoretical perspectives and beliefs, whether or not we try to see without an explicit theoretical perspective. Without going into a long de-

fence of this position, I simply cite the point made by Berger in his classic *Ways of Seeing* (1972, p. 8), that “the way we see things is affected by what we know or what we believe”. Researchers need therefore to do more than “privilege those contexts that insiders in each culture see as being most important” (Tobin et al. 1989, p. 10). They must acknowledge the implicit purposes, and particularly the moral and more broadly axiological purposes, that underlie their study. They need to ask why they are doing the study; what interests motivate them in carrying it out; and what values consequently inform the research. In this I follow Habermas’ position elucidated most fully in his *Knowledge and Human Interests* (1971). For Habermas (p. 197), “knowledge is neither a mere instrument of an organism’s adaptation to a changing environment nor the act of a pure rational being removed from the context of life in contemplation”. Habermas’ concern, in other words, was not merely epistemological: it was with the cognitive interests, more broadly conceived than as in the interests of private individuals or those of politically motivated groups, that ultimately influence the constitution of knowledge. He identified (1971, p. 308) three primary cognitive interests, the technical, practical and the emancipatory, to which correspond three types of disciplinary field:

The approach of the empirical-analytic sciences incorporates a *technical* cognitive interest; that of the historical-hermeneutic sciences incorporates a *practical* one; and the approach of the critically oriented sciences incorporates the *emancipatory* cognitive interest.

As Bernstein (1976, p. 193), clarified:

Each of these cognitive interests is grounded in one dimension of human social existence: work, interaction, or power. Work corresponds to the technical interest which guides the empirical-analytic sciences; interaction, to the practical interest which guides the historical-hermeneutic disciplines; power, to the emancipatory interest which guides the critical disciplines – the critical social sciences.

The empirical-analytic sciences, and the historical-hermeneutic sciences (which Habermas also described as the “systematic sciences of social action, that is economics, sociology and political science” [1971, p. 310]) have, in Habermas’ (1971, p. 310) view, the goal of producing nomological knowledge, the laws of nature. But, he asserts, “a critical social science will not remain satisfied with this. ... It is concerned with going beyond this goal to determine (not only) when theoretical statements grasp invariant regularities

of social action, ... (but also, more importantly) when they express ideologically frozen relations of dependence *that can in principle be transformed* (emphasis added)".

Much of what I have considered in this chapter has had implicitly to do with symbolic interactionism, which might lead readers to conclude that the field of comparative education might be best understood as a "historical-hermeneutic science" incorporating a "practical" interest corresponding to the field of human interaction. However, I wish to defend here the view that comparative education is best conceptualised as a critical social science, incorporating an emancipatory interest focused on the distribution of power and its associated attributes: economic wealth, political influence, cultural capital, social prestige and privilege, and the like. Comparative education research, and not only across cultures, has in my view its most worthwhile contribution to make in the domain of educational development. Indeed, it has been argued (Stromquist 2005) that this has been the area of greatest impact of research in the field of comparative and international education.

From a "raw" epistemological perspective, then, ethnographic researchers are at best naïve if they believe they can observe the practices and behaviours of another society or culture a-theoretically and make inductive inferences about the beliefs, about the patterns which supposedly underlie these practices, and about the ways in which these practices produce meaning, from an a-theoretical starting point. And if we follow Habermas (1971, p. 197) and acknowledge that epistemology cannot be purely disinterested and contemplative in the sense of an "act of a pure rational being removed from the context of life in contemplation", then social science researchers are epistemologically and morally best informed and most responsible when they take care to identify what cognitive interests inform and motivate their research. My view in response to this question is that comparative education research yields the most worthwhile results, at least with respect to our "journey toward equality and equity", when researchers attempt, from the very conceptualisation of their projects, to identify the axes along which educational and other goods are differentially distributed, and to disaggregate their object of study along those axes. As Bernstein (1976, pp. 198–199) concluded, this emancipatory cognitive interest provides the epistemological basis for Habermas' understanding of critique. It is the emancipatory cognitive interest that is the goal of critically oriented social science, of comparison across cultures to the end of educational equity.

Comparing Values

Lee WING-ON

In the late 1980s, Cummings and associates highlighted a revival of interest in values education across the world. Their book, entitled *The Revival of Values Education in Asia and the West* (Cummings et al. 1988, p. 3), contained rich information about how values education had penetrated the curriculum in 90 countries. Values education continued to “revive” for over a decade, leading to another book entitled *Values Education for Dynamic Societies*, edited by Cummings and another group of associates (Cummings et al. 2001). The book presented a study of values education in 20 country settings in the Pacific Basin, showing in one way or another how values education remained a major concern to educational leaders.

Although values are important to educators and researchers, the concept of values is both broad and elusive. Just as philosophy penetrates every area of studies, discussion on values can be found in nearly every discipline. It is almost impossible to pin down the scope of definitions of values, which extend from personal to collective levels and range between various forms of knowledge. For example, values can include self-actualisation, truth, goodness, individuality, justice, perfection and meaningfulness (Heffron 1997, p. 17).

Those who see values from the personal perspective consider values education to be a form of moral and character development (Nucci 1989). By contrast, those who look at values from the collective perspective tend to focus on social values, cultural values, political values, citizenship and belief systems such as religions and ideologies (Cheng 1997; Lee 1997; Beck 1998). Yet other scholars look at values from the perspective of forms of knowledge. In other words, they tend to look at the nature of the “value

realms", such as psychological, economic, ethical, aesthetic, poetic, literary, technological and legal values (Presno & Presno 1980). Nevertheless, since the concept of values is so broad, it is very difficult for any author to confine discussion to a single framework. Whenever values are discussed collectively, they have to be examined in the context of individual choices of values. Likewise, whenever values are focused on individuals, they are never separable from the society at large. Even when values are discussed in the perspectives of value realms, they are in one way or another related both to individual and collective preferences, and to time differences as well.

Studies of values and values education are always comparative. Many studies treat values as indicators, and measure the strengths or weaknesses of the values of particular persons or groups. Many of these studies employ measuring instruments, and some replicate studies in order to compare new findings with those of earlier studies (Lee 1997).

This chapter focuses on studies of values that are comparative by design, analysing values in different social and political systems. These systems are variously called societies, nations or countries, depending on the focus of the researchers. The chapter reviews discussions of comparative methods and approaches, using studies of values as a context of discussion. The cases chosen for analysis in this chapter mainly cover citizenship or civic-related studies. Citizenship is a value-laden area, and civic values are commonly included in citizenship studies.

The cases presented in this chapter have been chosen to illustrate typological variations in methods and approaches, and of course are not exhaustive of the field. The seven cases chosen can be grouped into three categories. Cases in Category A are related to size, scale and complexity of the research construct; cases in Category B focus on convergent and divergent values; and cases in Category C are comparisons in qualitative studies.

Category A: Size, Scale and Complexity of the Research Construct

Case One: Large Scale, Multiple Researchers, and Multiple Dimensions and Instruments – The IEA Civic Education Study

One of the largest studies of values is the Civic Education Study conducted under the auspices of the International Association for the

Evaluation of Educational Achievement (IEA) between 1995 and 2001. The study was massive in terms of the breadth of coverage (three domains and multiple issues), the number of countries (24 in Phase 1, and 28 in Phase 2), and the number of respondents (nearly 90,000). The study began with a qualitative phase, which required participants to provide:

1. A summary of the current status of civic education
2. A review of empirical literature concerning the civic education and social and political attitudes and behaviour of youth
3. Information regarding policies, practices and issues concerning preparation for citizenship organised around a set of 18 questions
4. An in-depth analysis of three domains, namely democracy, national identity and social cohesion and diversity
5. A country choice of issues from a list including economic mechanisms, mass media and environmental education and demanding an examination of teaching methods and textbook treatments

Based on the data collected from Phase 1 and the subsequent analyses, a cross-section framework covering three domains and five question types was designed for quantitative survey. The three domains studied in Phase 2 were democracy, national identity and social cohesion; and the five types of questions were (1) knowledge of civic contents; (2) interpretation of civic information; (3) concepts of democracy, citizenship and government; (4) attitudes towards the nation, the government, immigrants and women's political rights; and (5) students' current and expected participatory actions relating to politics. The questionnaire was very complex, and had three sections. Section 1 had 76 items to measure civic knowledge and skills. Section 2 had 17 items to collect students' opinions on participation in youth organisations and other background variables. Section 3 had 178 survey questions to assess students' civic concepts, engagement, attitudes and perceptions of school classroom climate. Students were required to complete the questionnaires within two class periods (Torney-Purta et al. 2001, pp. 14–30).

The study was overseen by an international steering committee supervised by the IEA headquarters. The chair of the international steering committee had to provide progress reports to the headquarters for permission to continue the study. Data collection and treatment had to be approved by the technical consultant assigned by the headquarters, and as a result certain country data not meeting IEA requirements were not

allowed to be used for comparative analysis. Each participating country had a national research coordinator, assisted by a research team and advised by a national advisory panel. In addition, the International Coordinating Centre and the Data Processing Centre were established through an open-tender process. The centres provided detailed guidelines for the participating countries to guarantee standardisation of the process of data collection.

Case Two: Small Scale, Multiple Researchers and Simple Instruments – A Comparative Study of Teachers' Perceptions of Good Citizenship in Five Countries

Few comparative projects can achieve the scale of the IEA study; but not all scholars approve of the IEA approach. IEA studies have been challenged for their relatively simplistic interpretation of the complex and massive data collected from the large number of countries, i.e. sources from a great variety of cultural, social, economic and political settings.

An alternative extreme approach uses an instrument that is as simple as possible, to minimise variations in interpretation of the data from the participating countries. Lee and Fouts (2005) in their study of teachers' perceptions of good citizenship in the USA, England, Australia, Russia and China, conducted during 1995–1999, deliberately made this point (pp. 11–12):

Two specific and closely related challenges to this kind of study are, first, to do with the problem of conceptual constraints, and second, the problem of measurement. The problem with conceptual constraints is stated succinctly by Thomas (1990): "Many educational [and other] concepts do not have equivalent meanings across social or cultural groups or even across nations." Indeed, this fact is the basis for the project "Good citizenship" and it means different things to different people. But in a narrower sense, the problem is one of ensuring that we are all talking about the same thing, not just about "good citizenship" but also about concepts used to define "good citizenship," such as moral education and patriotism. ...

In selecting the instrumentation and interview questions for this study, we did so with the recognition that the more complex the instruments and procedures, the greater the likelihood of translation difficulties and loss of comparability. For this reason, we have attempted to keep the survey and interview questions as basic and as straightforward as possible. While the instruments and interview

questions may not be ideal or as elaborate as might be used in a single country study, we believe they will be adequate for our purposes, with some limitations, and allow for translations that will allow comparisons across countries.

In sharp contrast to the IEA study, this five-country study adopted a simple two-page questionnaire, being administered to a convenient sample of about 500 teachers in each city of the participating countries, plus follow-up interviews with some teachers. Rather than developing a complex schema that contained multiple dimensions of concepts, this study was confined to four questions: (1) the qualities of a good citizen; (2) the influences on a person's citizenship; (3) threats to a child's citizenship; and (4) classroom activities that would be helpful in developing a child's citizenship. The four questions were reduced from a larger set of questions, many of which were discarded in the process of piloting and field test. The attempt to use a simple set of questions in the questionnaire survey to enhance comparability was extended to the follow-up qualitative interviews. The US team started the trial, and their experience was consolidated and distributed to the other participating countries as a kind of sample to be followed as closely as possible for enhancing comparability.

Case Three: Large Scale, Single Researcher, Multiple Dimensions and Instruments – A Comparative Study of Political Socialisation in Five Countries

While many comparative studies of values have been undertaken by teams, Hahn (1998) conducted by herself a comparative study of political socialisation in five countries, namely England, Denmark, Germany, the Netherlands and the USA. In her book *Becoming Political*, Hahn uses the first person singular – a refreshing departure from convention. For example, she explained (1998, pp. 1–5):

I faced the difficult challenge of identifying a sample of adolescents in five countries. I began to contact people whom I met at various international conferences on social studies, citizenship, and global education. ... I solicited and obtained classes of students, primarily ages fifteen through nineteen, in varied types of secondary schools in five countries. ... I constructed a questionnaire with scales measuring political attitudes of interest, efficacy, trust, and confidence. ... I conducted interviews with teachers and students to gain further insight into adolescent political attitudes and beliefs

into the process of citizenship education in each country. I conducted interviews with small groups of from two to eight students and spoke with whole classes. ... I analysed the quantitative data using factor analyses, item analyses, frequency distributions by item, means of items and scales, analyses of variance and effect sizes between means. ... I analyzed each component of the qualitative data set (field notes, interviews, documents, and my field diary) using constant comparative analysis to generate themes from the raw data.(emphasis added)

This set of statements shows how an individual conducted a comparative study that covered five countries, and it is no wonder that the study required 10 years to complete. Of course, Hahn did not work alone. She relied on many link persons in the respective countries, and she acknowledged many assistants in the process of data analysis. However, this represented individual effort in making decisions on when, where and how to work. Hahn's limitation was at the same time her strength. She did not have an international team to support her, and was therefore short of human resources and diversity in ideas for such a big study; but she did not need to cope with a cross-cultural team, worry about coordination, or ensure commonality across the country participants as in the two cases mentioned above. Hahn herself served as the overarching parameter, and performed the mediating role across the country cases.

Unlike Lee and Fouts, who reduced their scale and instrument to the minimum in order to achieve the comparability that they perceived to be possible, Hahn adopted a rather comprehensive approach with complex methods. She adopted both qualitative and quantitative methods for the comparative study. In respect to qualitative study, she analysed each component of the qualitative set using constant comparative analysis to generate themes from the raw data (including classroom observations, interviews of teachers and students and documents, field notes and field diary). In respect to quantitative study, she adapted several scales and developed some of her own for quantitative investigation. The adapted scales included the Political Trust Scale, the Political Efficacy Scale, the Political Confidence Scale and the Political Interest Scale. The items and scales developed by Hahn herself included the Future Political Activity Items, the Political Experience Item, the Freedom of Expression Scale, the Civic Tolerance Scale and the Classroom Climate Scale. These scales were used to measure political attitudes of interest, efficacy, trust and

confidence; political behaviours such as following news and discussing politics; attitudes towards free speech and press for diverse groups; beliefs in equal political rights for females as well as males; and perceptions of a classroom climate in which students are encouraged to express their beliefs about controversial issues (Hahn, 1998, pp. 3–4). Hahn's (1998, pp. 17–18) major discovery from her 10-year multi-method comparative study was of diversities within commonalities:

Although we speak often of Western democracies, ... there is much variety among their political systems and cultures. At the same time that the forms of democratic structures and processes vary considerably, the citizens of these countries inherited enlightenment values of individual liberty. ... [Nevertheless,] unique features of each national educational system evolved within shared ideas about the purposes and fundamental form of schooling.

Category B: Studies of Convergent and Divergent Values

Case Four: Studying Convergent Values – A Delphi Study on Policy Shapers in Nine Countries

Cogan (2000) and associates conducted a comparative study of citizenship in England, Germany, Greece, Hungary, the Netherlands, Thailand, Japan, Canada and the USA from 1993 to 1997. Their method was a cross-cultural adaptation of an Ethnographic Delphi Futures Research model. The Delphi method is commonly used to tap long-term projections in order to develop appropriate policy directives. The method is also known for developing procedures to condense diverse data into consensus data, and seek ways to interpret those data by both the respondents and the researchers. The study obtained responses from 182 policy experts, and generated 900 draft Delphi statements, organised as trends, characteristics and educational strategies/approaches/innovations. The research team developed a fine approach to determine significant weightings for grouping data (Kurth-Schai et al. 2000).

The process developed was in line with the purpose set for identifying convergence, particularly in setting specific criteria for selecting research partners and their respondents. Four criteria were developed to select research team leaders, namely demonstrated expertise in citizenship education and/or research methodology; a future-oriented vision;

interest in the study; and a commitment to remain with the project. The four criteria for selecting expert panellists were future orientation; leadership in field of expertise; interest in the areas of civic and public affairs; and knowledge of global trends and issues.

The criterion common to both groups led to a pattern in which future-oriented researchers studied future-oriented leaders. Using Berg-Schlosser's (2002) concept, this belonged to a "similar systems, similar outcomes" approach. As a result, eight citizenship attributes were identified, and a schema of four dimensions was developed based on which a multi-dimensional citizenship model was constructed. However, the project team did not ignore non-consensus data. A specific chapter of the report examined non-consensual statements and the degree of disagreement. In general, the team identified many East-West differences, and noted that leaders in the East had a higher degree of agreement vis-à-vis their Western counterparts (Karsten et al. 2000).

Case Five: Studying Divergent Values – A Sigma Study of Leaders in 11 Countries

In 1996, Cummings et al. initiated a project on the future focus of values education in the Pacific Rim. The study lasted for three years, and involved 11 countries. It started with a simple framework which focused on four core questions (Cummings 1998, p. 1):

why are values changing, **what** values should receive the greatest emphasis in values education, **who** should be the focus of values education, and **how** should these values be developed and transmitted?

At the outset, the team proposed a Delphi study, as it was an obvious approach for studying value orientations of leaders (Cummings et al. 1996). However, when the project started, and country representatives met, the team members changed their mind. Cummings' working report noted (1998, p. 1):

This group [of country representatives] was appreciative of the recent trends and was especially conscious of the divergent positions in the region. At first the group considered ways to promote greater regional consensus. But then, in a surprising intellectual reversal, the group concluded that the diverging tendencies were a reflection of the emerging complexity of the contemporary life. Thus the group readjusted its focus, and agreed to join forces in developing a meth-

odology for analysing the diverse patterns. The methodology involved a combination of national case and the international sigma survey.

Having acknowledged divergence as the defined nature for studying values across countries, the project dropped the idea of Delphi study and instead conducted a sigma study. The team argued that methodology for highlighting differences required a new survey approach, the Sigma International Elite Survey. In the final report, Cummings et al. (2001, p. 14) stressed:

The letter sigma is used by statisticians to symbolise variance. The sigma approach developed in this study seeks to highlight differences or variance. It should be contrasted with the Delphi approach, which seeks to develop consensus and thereby to reduce variance.

The special features of the Sigma Survey were said to be:

- The intentional selection of an elite sample from each setting that represents important points of variation in terms of political/ideological affiliation, social position, gender and regional location
- The development of questions that reflect the particular concerns of each setting
- The use of a question format that requires respondents to clarify where they stand (e.g. rank-ordering from a list with many options)
- Follow-up questions to selected respondents who take exceptional positions on particular responses

Having decided that the study was not to look for convergence, the project adopted a divergent approach to study divergent values (Cummings et al. 2001, p. 8):

Recognising the impossibility of developing a meaningful definition of leaders that would fit the various countries and settings under consideration, no effort was made to choose a random sample. Rather each team was expected to choose those leaders that best reflected their setting, keeping in mind the common commitment to diversity. By social position, 6 percent of the sample are political leaders, 17 percent are central educational authorities, 5 percent are religious leaders, 11 percent are from related NGOs [Non-Governmental Organizations], 17 percent are intellectual leaders, 12 percent are

academics, 18 percent are local school leaders, and 20 percent are curriculum designers or teachers of values education; 21 percent are women. This distribution was more or less similar for each setting, though the full details for the setting samples can be found in the respective chapters. In total, responses were obtained from 834 leaders.

According to Berg-Schlosser (2002), this arrangement adhered to the “different systems, different outcomes” approach. The result of the analysis was the identification of patterns of variation in value orientation among the participating countries. The team conducted a multidimensional scaling of 15 rationales for values education, and located countries between two continua, namely individualism and collectivism, and diversity and nationalism. The team further identified four patterns that could locate the participating countries, namely Far West Liberals, Southeast Asian Moralists, Confucian Middle Way and Former Socialist/Centrists. Nevertheless, like Cogan and his associates, who could not ignore non-consensus data in the process of converging consensus data in the Delphi study, Cummings and his team could not ignore convergence in the process of studying divergence in values. The study concluded that the value areas receiving the most support were personal autonomy, moral values, civic values and democracy. The value areas at the second level of support were work, ecology, family, peace, national identity and diversity. The value areas receiving the lowest priority were gender equality, global awareness and religion (Cummings 2001, pp. 289–290).

Category C: Comparing Cases in Qualitative Studies

Case Six: A Study of School Cases in Six Societies

Cogan et al. (2002) compared civic education in six societies, namely New South Wales (Australia), Hong Kong, Japan, Taiwan, Thailand and the American Midwest, in 1997–2000. Unlike the above-mentioned studies that employed a combination of quantitative and qualitative approaches, this study basically employed qualitative approaches, comprising historical overview, policy and documentary analysis and a study of school cases in each participating society. The number of school cases selected ranged from two in Hong Kong to four in New South Wales. The resulting features of comparison also differed from the above-mentioned

studies, as obviously there was no quantitative data to be compared. Instead, there was detailed description and analysis for each participating society, and the overall comparison was done in the form of statement juxtaposition. Three summary tables of comparison were provided in the final report, on (1) government policies, (2) knowledge/values promoted and (3) civic values, highlighting major points judged to be important to the research team. The research team highlighted the term “cross-case analysis” in their comparative overview chapter, showing a distinctive kind of comparison as compared to those other studies mentioned above. Moreover, the concept of case is multilayered. The study was a comparison of comparative cases, or a study of case of cases. Each participating society identified school cases to be compared, and the team further compared the participating societies as individual case units. Moving a bit even further, they developed them into cultural cases, such as “the Asian societies” and “the Western societies” (Morris et al. 2002).

This cross-case analysis identified both convergent and divergent values. On the side of convergence, the researchers identified eight clusters of values, namely self-cultivation, family values, democratic values, fair government, economic life, social cohesion/diversity, civil life and community and national identity. However, the study identified much more divergence than convergence. The researchers identified four sets of tensions across all the societies (Morris et al. 2002, p. 174):

- The rights of the individual versus the interests of the community
- Maintaining social stability versus social change/reconstruction
- Social cohesion versus social diversity
- Providing a body of received knowledge versus treating knowledge as provisional and constructed

Moreover, there were rich expressions of divergence in the comparative overview, such as “wide variations emerged”, “pattern of variation”, “varied conceptions of ... civic education”, “the extent of variation is most marked” (p. 177). Another feature of their comparative work was that, instead of presetting parameters for comparison, they chose the concept of minimal and maximal citizenship as a framework for locating their society cases.

Case Seven: Secondary Qualitative Case Analyses

Another cross-case comparison is the IEA Civic Education Study. As explained above, the study had two phases, with Phase 1 designed as a

qualitative component that would help instrument construction for the quantitative survey in Phase 2. The research team formulated 18 framing questions to unify supply of background information, and the country representatives agreed to confine their analyses to the domains of democracy, national identity and social cohesion and diversity. As a result, 24 qualitative case reports were produced. In order to make sense of these case reports, and especially to inform Phase 2 of the study, the International Steering Committee invited a number of scholars to analyse the cases. The different methods and approaches that these scholars took provided significant insight for qualitative comparisons of the cases.

These analyses were published in a report edited by Steiner-Khamsi et al. (2002). The editors provided insightful discussion on the various comparative methods and approaches. One observation was related to the selection of cases. Most authors developed contextual sampling criteria that allowed them to concentrate on a few cases. The majority of authors reduced content by focusing either on specific core domains of civic education (democracy, national identity or diversity/social cohesion) or levels of analysis (policy, practice, curriculum, etc.). Another method for narrowing the radius of the analysis was informed by a review of controversies on theories of citizenship and civic education.

Two approaches were adopted in deriving the interpretation framework. One adopted a grounded theory approach, by (1) identifying keywords from the case reports, (2) selecting a few themes for analysis, (3) choosing a focus developed from this process by ruling out themes that were non-comparable, and then choosing a theme that emerged in the process and (4) reviewing the themes with relevant concepts in the literature. A few authors developed interpretive frameworks based on such literature reviews, trying to examine whether the cases matched the theoretical model. One author engaged in a meta-level analysis reflecting on the process of how the qualitative data was collected and how that process differed from other studies in qualitative research or comparative education (Steiner-Khamsi et al. 2002, pp. 12–14).

When conducting the case comparison, these authors had varied views on what constituted a case. Some treated the country case studies as units of analysis for cross-national comparison, whereas others regarded the country case studies as bounded systems that represented different models of citizenship or civic education. Most authors used sampling criteria that clearly reflected the design of contrastive analysis. They selected cases that they perceived to be “most different” from each other

with regard to political system, educational system or other criteria. The authors who reduced the sample of cases applied a contrastive method based on the “most different systems and different outcomes” design. Steiner-Khamsi, for example, selected the USA, Romanian, German and Hong Kong cases because she judged that these cases represented conceptions of citizenship, and she expected to find different outcomes with regard to civic education curricula (p. 26).

The editors found that qualitative cross-national analysis provided room to address unexpected findings and that the case study material “talked back”. While reviewing the qualitative database, three of the authors found the original conceptual framework of the IEA Civic Education Study too narrow. Based on the case study analyses that they conducted independently, they suggested extension of the original conceptual framework to cover economic and supranational aspects of citizenship.

Steiner-Khamsi et al. (2002, p. 34) commented that in many respects, qualitative researchers share the same methodological challenges of cross-national data analysis as quantitative researchers. For example, both need to deal with problems of sampling, reducing data, validity and reliability. However, when qualitative comparativists analysed their case-study material cross-nationally, they had to ensure that the “texture” of the case-study material was not harmed. The material needed a different treatment from open-ended questions in a survey. Steiner-Khamsi et al. (2002, p. 34) concluded:

Case studies are coherent stories, wrapped in theory. They tell us something about causal relations in a bounded system and are much more contextual than all open-ended questions in a survey combined. Not losing sight of contextuality appears to be a challenge that only qualitative comparative researchers are privileged to have.

Discussion and Conclusions

The above review shows that in comparative values, despite differences in the choice of methodology (such as quantitative and/or qualitative), the size of studies (such as the number countries, cases and sample size), what values to look for (such as convergent and/or divergent values), and investigation approaches (such as inductive [observation derived from

data] or deductive [verification of theories]), these studies invariably examine values in terms:

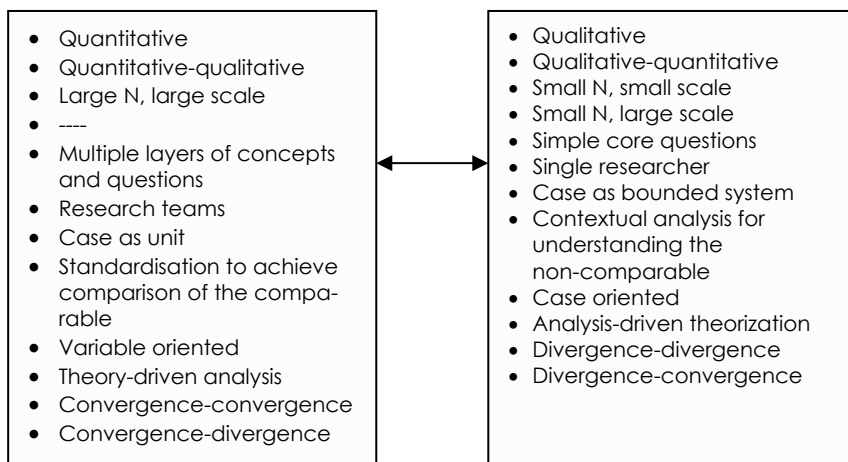
- What are the preferred values in society?
- What are the interactions between personal values and society values?
- Why are particular values emphasised (and very often understood in terms cultural tradition and social change)?
- What explanation tools can be adopted to understand these scenarios in terms of theorisation?
- How are these values disseminated in the education system?
- Is there a gap in policy (in terms of values espoused by policy-makers) and implementation (in terms of values held by individuals, such as students and teachers, and the school)?

However, in approaching the comparative study, scholars always face dilemmas in the choice of methods and approaches. Levi-Faur (2004) commented on some of these dilemmas, including as the question of size of sample (small N or large N), the struggle between the quantitative–qualitative divide, and the choice of prioritising attention towards practicalities or ideologies (Figure 8.1). The seven cases reviewed in this chapter show significant variations in approaches. In terms of size of sample, the number of countries ranged from 5 to 28. All the studies reviewed except that by Hahn adopted a team approach. Many favoured study of multiple dimensions, thus requiring complex instruments, though one reduced the instrument to its simplest form in order to promote ease of comparison.

The cases also represented two extremes in research paradigms. One extreme was entirely quantitative, which standardised variables using numerical methods; and the other extreme was entirely qualitative and sought to uncover the meanings of citizenship and values through case studies. In the studies adopting quantitative approaches, the topics were narrowed down by statistical methods such as factor analysis. In Case One, for example, final topics were knowledge of civic contents; interpretation of civic information; concepts of democracy, citizenship and government; and attitudes towards the nation, the government, immigrants and women's political rights. These topics were derived from a broad initial focus, followed by detailed questionnaire survey. Cases Four and Five are similar. By contrast, the qualitative methods, such as Cases

Six and Seven, used focus group interviews and content analysis of textbooks and curricula.

Figure 8.1: Varied Methodological Emphases in Comparative Studies of Values



Some of the studies, however, used both approaches and lay between the two extremes. They reflected or represented efforts in comparative research in the field of social sciences to combine methods instead of dichotomising them. As noted by Coppedge (1997, p. 1) large N and small N studies can be complementary to one another:

Small N Comparison tends to develop “thick” (complex, multidimensional, contextualised, or rich) concepts and theories that are well-suited for description and for making inferences about simple causation on a small scale or in a few cases; but thick concepts and theories are unwieldy when it comes to generalisation or rigorous testing of complex hypotheses. On the other hand, quantitative analysis is justifiably criticised for its “thin” (reductionist or simplistic) concepts and theories, but it is the best method available for testing generalisations, especially generalisations about complex causal relationships.

Coppedge further argued that thick concepts can be translated into the thin format of quantitative data, and that thin concepts can be thickened by employing qualitative methods to complement quantitative studies.

As illustrated by the cases reviewed in this chapter, comparative value studies tend to lean on the side of qualitative analysis, even though the quantitative component can also be emphasised. In quantitative research, especially in the large IEA study, a country often constitutes one unit in the analytical framework, being grouped with the other countries with similar outcomes. However, this does not seem to be what most comparative value studies seek. Just knowing where one country is located alongside other countries does not seem to be able to satisfy the researchers, who tend to ask what the values *mean* to the countries and societies concerned. This question leads to a heavier emphasis on the qualitative approach, and contributes to emphasis on “the ontology of kind” rather than “methodology of size” (Levi-Faur 2004).

Some comparative studies look for convergence, but others seek divergence. It seems obvious that the starting points influence the choice of approaches, sampling of respondents and the prediction of outcomes. However, two cases reviewed in this chapter show that convergent studies have to acknowledge divergence, and vice versa. Berg-Schlosser’s analysis of comparative qualitative research designs (2002, cited by Steiner-Khamsi et al. 2002) identified a 2×2 matrix that distinguishes between similarity of systems (cases) and predictions with regard to outcomes (variables), as shown in Figure 8.2.

Figure 8.2: Sampling Design in Case Study Format Research

Most similar systems + similar outcomes	Most different systems + Similar outcomes
Most similar systems + different outcomes	Most different systems + different outcomes

In a different way, Levi-Faur (2003) observed that case-oriented comparative studies can be grouped into a difference–agreement matrix. This is shown in Figure 8.3.

Figure 8.3: Four Inferential Strategies in Case-Oriented Comparative Research

	Difference	Agreement
Most similar system research design	Dealing with differences in similar cases: minimise variance of the control variables, maximise variance in the dependent variables	Dealing with similarities in similar cases: minimise variance of the control and dependent variables
Most different system research design	Dealing with differences in different cases: maximise variance of the control and dependent variables	Dealing with similarities in different cases: maximise variance of the control, and independent variables, minimise variance in the dependent variables

Source: Levi-Faur (2004).

In the secondary qualitative analyses of the IEA Civic Education Study, most authors chose the “most different systems, most different outcomes” approach. From the cases selected for discussion in this chapter, it seems that the more the study belongs to a qualitative case, the more divergence is identified. It is telling that in the cross-case analysis conducted by Morris et al. (2002), the term “variations” appears many times on a single page. This also shows that the more one looks into the context, the higher the tendency for the researchers to attend to “thick descriptions” of the texture of the cases, and thus the higher degree of divergence. This phenomenon reflects findings about case-oriented approaches in social science research, which are characterised by “small N, many variables” (Steiner-Khamsi et al. 2002).

Approaches to analysing qualitative cases can also differ. The secondary qualitative analysis of the IEA cases included both grounded theory approaches and hypothesis-driven analyses. The former attempted a continued approach of narrowing down the scope of analysis until the researcher found a distinctive focus that was related to concepts of citizenship. The contextual analysis of concepts was further compared with existing theories for verification. The latter started with a certain theory or hypothesis whereby the choice of countries was made, and then tried to verify these cases with the theory (or vice versa). For example, Steiner-Khamsi (2002, p. 21) chose four countries for comparison, based upon her hypothetical model that distinguished four different spheres of

citizenship – constitutional, economic, civic and moral. She found that what she had anticipated did not in fact emerge from the data:

Civic education curricula in Hong Kong are not particularly moralistic, German and Romanian curricula emphasize constitutional aspects no more than other countries, and civic education programmes in the United States do not place a particularly high priority on teaching about the economy nor do they engage students in civic actions. Moreover, in all four examined case studies, the political and economic spheres are inextricably linked.

Analysis of the studies identified in this chapter shows that comparative value studies have enriched the field of comparative education by showing complexities about values in context, how education interplays with these values, and how values can be grouped by countries, and countries grouped by values. The attention to context is a natural orientation in value studies, and this has led to many surprises in the processes of comparison, including finding divergence in convergence and convergence in divergence. Moreover, the comparison is theory-rich, either from grounded approaches or theory-driven approaches, and theory advancement takes place in the process of theory verification. The comments of Levi-Faur (2004) best represent the features of the comparative studies reviewed in this chapter:

To celebrate comparative research is to look for new languages, new terms, new procedures and new instruments of inference; it is, in short, to innovate and to move on with a critical view of the dominance of both case-studies and statistical approaches. It also implies an effort to bridge the divide between case- and variable-oriented research.

Indeed, all the comparative value studies reviewed in this chapter manifest attempts to find new languages, new terms, new procedures and new instruments of inference. They have enriched understanding in both contents and methods, and particularly in the varied ways to look at similar questions in relation to values.

Comparing Educational Achievements

T. Neville POSTLETHWAITE & Frederick LEUNG

When George Bereday, a famous comparative educator from the Columbia University in New York, first heard of the work of the International Association for the Evaluation of Educational Achievement (IEA) in the early 1960s, he said that the IEA researchers were comparing the incomparable. Perhaps he meant that it was impossible to compare pupils and schools from different cultures. Perhaps he meant that there were so many differences between systems of education that it was impossible to compare them. After all, the pupils begin school at different ages, the curricula are different, the ways in which teachers are trained are different, and, and, and, ...!

Bereday might have asked whether, for example, it was “fair” to compare the achievement of a Japanese 10 year old with the achievement of a Netherlands pupil of the same age? On the one hand they have different numbers of years of schooling, different curricula and they are spread across a different number of grades because of grade repeating, and therefore it is not “fair”. On the other hand they can be regarded as being the same age and what is really being judged is what a system of education does with the children in an age cohort under its authority. These are some of the issues that will be addressed in this chapter.

Why Compare Achievements?

Before beginning to examine some of the problems associated with comparing, it would be wise to ask why researchers and policy makers wish to compare achievements among countries. The major reasons for comparison can be phrased as a Minister of Education might ask:

- Is our achievement higher, the same as, or lower than that in comparable points in other systems?
- How do the inputs and processes in other systems, especially those achieving better than ours, compare with our inputs and processes, and what are the costs?
- How different or similar are schools in other countries compared with ours? Is there much variation among schools?
- How large are the differences between subgroups of students (gender, socio-economic groups, urban/rural, and so on), and how do these differences compare with those in our system?
- There are other questions, but these are the main ones. They can all be summed up as: "What can we learn from other systems?"

While international studies always compare between countries, some also make comparisons within countries. The questions posed within countries typically focus on the magnitude of differences in achievement within and among classes, within and among schools and between gender or other groups. Comparing achievement implies that there is a common understanding on the nature the subject(s) being compared. It also assumes that comparable groups of students or schools are being compared.

What are the Procedures for Measuring Achievement?

Comparing educational achievement may seem at first sight to be a simple exercise. If the aim of the study is to compare the mathematics achievements of Grade 8 students in, say, Germany and Chile, is it not simply a matter of administering a mathematics test to some Grade 8 students in the two countries and then comparing the test results? In practice, it is not as simple as that. Several pages below are devoted to this topic simply because it is so often underestimated by many comparative educators.

In any study of achievement, whether national or international, the first step is to create a framework that describes and defines the subject area and produces a test blueprint. The second step is to produce a test; and the third is to produce a score for each student. This section deals with each of these aspects, beginning with the following set of questions:

- How is the subject matter defined?
- What kinds of summary scores are needed?

- What is the blueprint like?
- What kinds of items are used?
- Who writes and checks the items?
- How are the items translated?
- How are the items trialled?
- How do the final tests look?

How is the Subject Matter Defined?

If mathematics achievement is taken as an example, the first step is to “define” mathematics. Does mathematics mean the same thing in Germany and in Chile? There is a need for a common understanding of what actually is being measured.

In some of the older IEA studies (see, e.g. Husén 1967; Comber & Keeves 1973), the work began with a content analysis of the curriculum in each of the relevant grades in each country. After much debate, an agreed framework describing the subject area was produced. An example of the kind of debate that ensued came from the mathematics framework for the Third International Mathematics and Science Study (TIMSS). For the content area of geometry, some countries included Euclidean geometry, others transformational geometry, and yet other countries what became known as the intuitive approach. Which were to be included?

On the basis of the framework, a test blueprint must be produced. In the first IEA mathematics and science studies, the blueprint consisted of different content areas on the vertical axis and a set of taxonomic behaviours on the horizontal axis. In some later studies such as the TIMSS, the dimension of “perspectives” was added (Robitaille et al. 1993, p. 44). Another example is the Programme for International Student Assessment (PISA) study conducted under the auspices of the Organisation for Economic Co-operation and Development (OECD), in which an exhaustive exercise was undertaken in order to reach consensus on what knowledge and skills would be required by 15-year-olds in the areas of reading literacy, mathematical literacy and scientific literacy (OECD 1999). For example, according to one specification (OECD 2001b, p. 23): “PISA mathematical literacy tasks required students to be familiar with key mathematical concepts, reproduce standard mathematical operations, to make connections and to engage in wider mathematical thinking in various real-life situations”. This was different from the approach taken by the IEA studies. In the projects of the Southern and Eastern African Consortium for

Monitoring Educational Quality (SACMEQ), attention is also focussed on the hierarchical categories of competency skills in reading and mathematics. This is because the users of the research report can easily see which percentage of students have achieved which levels of skills. This is more meaningful than, say, a score 487. Several examples of the competency skill approach have been given in this report (see also Postlethwaite 2004).

There is no right or wrong in this definition of what the subject matter is. The definition is decided by the curriculum specialists participating in the study. Obviously, when interpreting results it is important to refer back to the definition of the subject matter. Since it is impossible to construct a blueprint which is fair to all countries, it is often said that the final blueprint is "equally unfair to all countries".

What Kinds of Summary Scores are Needed?

If the reporting of the test results will have not only a total score but also domain scores, then it is important to ensure that there are enough items in the relevant domains in order to be able to generate the domain sub-scores. If items are to be written for different levels of skills in the subject matter, then these levels must also be determined in advance. Thus, it is important to identify the kinds of scores that will be needed because this will determine the kinds of items to be written and at what levels of difficulty.

If, say, reading and mathematics has to be measured, then it is usual to have a total score for reading and a total score for mathematics. It is also usual to have domain scores such as narrative prose, expository prose and document reading in reading literacy; and number, measurement and space in primary school mathematics. The notion of skill levels is less well known. Skill levels are hierarchical in difficulty/complexity. For example, the reading literacy skills in a 2001 Vietnam Grade 5 study conducted under the auspices of the World Bank are shown in Table 9.1. In this type of assessment, the percentages of pupils achieving each level are reported. This form of reporting is felt to be more important than total scores or even domain scores, because it informs the policy makers and curriculum developers of the kinds of reading that have or have not been achieved.

Table 9.1: A Hierarchy of Reading Literacy Skills

Reading skill levels	
Level 1	Matches text at word or sentence level aided by pictures. Restricted to a limited range of vocabulary linked to pictures
Level 2	Locates text expressed in short repetitive sentences, and can deal with text unaided by pictures. Type of text is limited to short sentences and phrases with repetitive patterns.
Level 3	Reads and understands longer passages. Can search for information backwards or forwards through text. Understands paraphrasing. Expanding vocabulary enables understanding of sentences with some complex structure.
Level 4	Links information from different parts of the text. Selects and connects text to derive and infer different possible meanings.
Level 5	Links inferences, and identifies an author's intention from information stated in different ways, in different text types, and in documents where the message is not explicit.
Level 6	Combines text with outside knowledge to infer various meanings, including hidden meanings. Identifies an author's purposes, attitudes, values, beliefs, motives, unstated assumptions and arguments.

Source: World Bank (2004).

Table 9.2: Number of Mathematics Items of Each Type and Score Points, by Reporting Category, Population 1

Reporting category	Multiple choice	Short answer	Extend- ed-re- sponse	Total items	Score points
Whole numbers	19	5	1	25	28
Fractions and proportionality	15	2	4	21	28
Measurement, estimation and number sense	16	3	1	20	21
Data representation, analysis and probability	8	2	2	12	15
Geometry	12	2	–	14	14
Patterns, relations and functions	9	1	–	10	10
Total	79	15	8	102	116

Source: Martin & Kelly (1996), Table 3.6.

What is the Blueprint Like?

While a framework provides the scope of the test, a blueprint encapsulates the emphasis in the various parts of the framework. A blueprint consists of the areas to be tested (based on the framework), the item type(s) to be used, and the relative emphasis on different parts of the framework (number of items and the total score in each area). An example of a test blueprint from TIMSS 1999 is given in Table 9.2.

What Kinds of Items are Used?

Several kinds of items can be used, ranging from fully open-ended to multiple-choice items. The test designers must decide on the kinds of items they will use. Many international studies use multiple-choice items. They are not easy to write, especially if they are also to be diagnostic items where the kind of wrong thinking can be inferred from the wrong answers chosen.

In the mid-1990s there was a movement in favour of so-called performance items. Multiple-choice items, it was said, only required pupils to recognise right answers, and guessing could be involved; what was important was to have pupils develop the right answers. However, multiple-choice items have the advantage that, although difficult to develop, they are cheap to score. Short-answer items have become more common, and good optical scanning devices allow scoring by computer. True/false items are rarely used because of the problem of guessing.

The problem with many performance items is that they have to be scored by teams of markers, often with complicated scoring systems. This requires extensive training of scorers, and costs a lot of money.

Who Writes and Checks the Items?

In an international study, it is normal to have item writing groups within each national centre. Once the blueprint is known, then the national teams are asked to contribute items either from existing tests or by writing new ones. The items are sent to an international test committee which decides which ones to select, perhaps with modification. The proposed items are checked by the national committees again, and finally, after a certain amount of negotiation, agreed upon.

How are the Items Translated?

Translation of instruments (test items and questionnaire questions) is more than simply a technical issue, for the accuracy of the translation

affects both the substance of what is being tested and the comparability of the results. For an international study, one language must be chosen as the working language and the test (and other instruments such as questionnaires) is usually constructed in that language. When translating the test items into other languages, it is important to ensure that the sense is the same, the difficulty level in the language is about the same, and the cognitive processes required from the student to answer the questions as similar as possible.

This work is not easy, especially if many countries are involved. In TIMSS 1995 for example, 31 different languages were involved, and the international study centre had teams of professional translators checking the accuracy, sensitivity and equivalence of the translations. In the PISA project, a number of quality-assurance procedures were implemented in order to ensure equivalence between all national versions of the test and questionnaire materials used by participating countries (Adams & Wu 2002; Grisay 2003; OECD 2004a, b). These included:

- Providing two parallel source versions of the material (in English and French), and recommending that each country develop two independent versions in their instruction language (one from each of the source languages), and then reconciling them into one national version
- Adding systematic information on the Question Intent to the test and questionnaire materials to be translated, in order to clarify the scope and the characteristics of each item, and extensive Translation Notes to draw attention to possible translation or adaptation problems
- Developing detailed guidelines for the translation/adaptation of the test material, and then for revising it after the Field Trial, as an important part of the PISA National Project Manager Manuals.
- Training key staff from each national team on the recommended translation procedures
- Appointing and training a group of international verifiers (professional translators proficient in English and French, and with native command of each target language), in order to verify the equivalence of all national versions against the source versions

It can be seen that translation is neither easy nor inexpensive; but it is something that international test constructors cannot ignore.

How are the Items Trialled?

Normally, three to five times more items are required for any one cell in the blueprint than will be actually needed for the final test. These items are split into a number of trial forms, and each trial form is then administered to a judgement sample of about 200 pupils from the defined target population.

The test data are then entered into a database, and item analyses conducted. The analyses are usually those of classical and item response theory. Checks are made that the items measure one underlying trait for the measure in question, that the items do not favour one group versus another (e.g. boys versus girls, or rural versus urban children). Scores derived from the tests must be deemed to be reliable and valid. In some cases, further item writing and trialling is required. A final set of items is then agreed upon.

How do the Final Tests Look?

Items are assembled into a test more or less in ascending order of difficulty. Depending on the subject area, the numbers of items required to cover the content of the blueprint may be too many for a test of, say, 60–90 min.. In this case rotated tests can be used. Several tests are created, but with items that are common to each tests which allow for calibration later on. These tests are then rotated over pupils within schools. Through this method it is possible to create school scores, but often it is not possible to create individual scores on the same items. Where tests are not part of the school culture, it is sometimes difficult to get a good rotation of tests.

Whom to Compare?

After deciding what is to be compared, the next major question is whom to compare. This requires consideration of age versus grade groups, and raises questions of the defined population.

Age Versus Grade Groups

Comparative studies usually specify an age level or a grade level, or sometimes a combination of both. The PISA study, for example, tested 15-year-olds. Measuring an age group gives information on what the system has done to an age cohort under its care. However, in some countries the official age of entry to school is relatively young (e.g. four years old in the Netherlands), and in other countries students enter school much later

(e.g. six, or seven, or even eight years old in some South American and African countries). So is it fair to compare the nine-year-olds in the Netherlands who have had five years of schooling with the nine-year-olds in South American countries who have just started school?

Age-based definitions also face practical complications. For the PISA study, 15-year-olds may have been in two grades at the time of testing for some countries, but in countries with frequent grade repetition the 15-year-old pupils may have been in several grades. This makes the sampling and testing very complicated and hence expensive.

Whereas the concept of age is not ambiguous, the concept of grade is. Does Grade 4 mean the same thing in different countries? Some education systems have a number of years of preschool before students start Grade 1, and it is simply a matter of tradition that the first year of primary or elementary school is called Grade 1. At the other end of the scale, if researchers decide to test students in their final year of schooling (as was the case in the IEA's Second International Mathematics Study), some systems of secondary schooling end at Grade 10 and others at Grade 13. Three years difference in the number of years of schooling is likely to make a lot of difference to achievement, and therefore, it is argued, they should not be compared.

Further, the dropout rate is very different between systems. Even if all systems have the same number of years of schooling, the percentages of an age group remaining in school may be very different. In the USA, about 90 per cent of age groups remains in school until Grade 12, but in some other countries it is as low as 20 per cent. However, if a subject such as Physics is taken, even in the USA only 5 per cent specialise in Physics. In other countries the percentage of an age group specialising in Physics may be between 7 and 35 per cent. Are these parts of an age or grade group therefore comparable?

For TIMSS 1995, to overcome this difficulty a grade-age definition was used in the first two of the three populations tested. The first population, for example, was defined as those students in the two adjacent grades with the most nine-year-olds. Even this definition was not totally satisfactory, however, because the nine-year-olds in some countries had substantially fewer years of education than the nine-year-olds in other countries. In choosing between a grade definition and an age definition, the essential question to ask is whether the researchers are more interested in the effect of schooling (in which case they should use a grade

definition) or of maturity (in which case they should choose an age definition).

Defined Population

Even when a fairly good description of the desired target population for comparison has been achieved, such as "All pupils in Grade 5 in full time schooling on 25 April in government and non-government schools", there is still the problem of what constitutes "all pupils". For example, should the following Grade 5 pupils be included:

- Pupils who live in very remote areas, to whom access is difficult and the costs of testing may be very high
- Minority groups who speak different languages from the majority in the population
- Pupils who follow curricula that are different from the majority of the population (e.g. because they are in international schools)
- Children with severe disabilities such as mental handicap

Normally exclusions are allowed, usually on the grounds of cost. However, the excluded population should never exceed 5 per cent of pupils in the desired population. Arriving at the defined population (i.e. the desired population minus the excluded population) requires a very good comparative educator who knows the systems to be compared.

Once the defined population has been identified, the populations may or may not need to be sampled. In an international study conducted under the auspices of SACMEQ, the Seychelles did not need to be sampled because it is a small country in which the researchers could relatively easily access all the children. Thus, in this case the researchers tested the whole population of Grade 6, which contained about 1,500 students (Leste et al. 2005). However, in most cases the population is large, and it is too costly to test all. In this situation, sampling is used.

The number of pupils to be sampled depends on the standard error of sampling required. In most international studies it is common to aim for a standard error of sampling to be 0.05 of the standard deviation of the measure. In this case, a sample equivalent to at least 400 randomly selected pupils is needed. Since it is virtually impossible to draw a simple random sample of all pupils in a particular grade in a country, two-stage sampling is used: the primary sampling unit is the school, and the second stage of sampling is the pupil. Schools are typically drawn with a

probability proportional to the enrolment of the grade that is the focus of the study.

In some studies, intact classes of pupils within schools are drawn; and in other studies a random sample of pupils across classes within the focal grade is drawn. In the former case more meaningful multivariate analyses can be undertaken, but the variance within school is inevitably underestimated. There is also the problem of defining a class. Where teaching for all subjects is done in intact classes, the answer is easy; but in some countries students are grouped in different ways for instruction in different subjects. These problems need to be addressed, and a common procedure agreed.

After the data have been collected, recorded and cleaned, the next problem concerns the shortfall of pupils (or schools) in one or more of the strata used in the sampling frame. If there has been shortfall, then corrections need to be made by using sampling weights for correcting for disproportionality between strata. The weights are calculated and then added to the data file.

Comparing Levels and Equity of Performance

Pupils Within Schools

Most teachers (and many parents) are eager to know the strengths and weaknesses of pupils in different subject areas. This is true whether the study is national or international. It is very important for researchers to give feedback to the teachers and schools. Among other benefits, it increases the goodwill of the schools to cooperate in future studies. The teachers may well ask:

- What are my pupils' achievements on specific subdimensions of mathematics and science?

Where whole classes have been tested, it is possible to give feedback to schools about sub-scores and skill scores for pupils in a class; but this is not the case if the tests have been rotated.

An example of feedback to a class for the first four pupils is presented in Table 9.3. From such a table it can be seen that Pupil 1 was the best in both subjects, and that Pupil 3 had a higher score in mathematics than in reading. It would also be possible to compare the class with

similar classes in the country and with the average score of classes in the international study.

Table 9.3: Sub-scores for First Four Pupils in a Class

Pupil	Reading sub-scores			Mathematics sub-scores		
	Sub-score	Sub-score	Sub-score	Sub-score	Sub-score	Sub-score
	A (max = 20)	B (max = 20)	C (max = 20)	A (max = 15)	B (max = 15)	C (max = 15)
1	17	15	10	12	13	12
2	10	9	9	7	8	9
3	6	5	7	12	14	13
4	7	8	9	10	12	11

Levels of School Performance

The school principal’s question may be something like:

- On which sub-domains of which subject areas and at which grade levels is my school doing well or poorly in comparison with similar schools in my country and with all schools in my country?

To address this kind of question, the principal needs one or more points of comparison. One would be a “relative” level of performance which focuses on the performance of the school with respect to similar schools or even all schools in the target population in the country.

Table 9.4 illustrates this point with data from Hong Kong, and shows the mean and standard deviation of the TIMSS 1999 Rasch scores (with mean 150 and standard deviation 10) for a Grade 8 class in a certain school for mathematics and science. These results enable the principal to compare the school’s performance with that of similar schools and all other schools in the target population.

In this case, the mathematics and science scores of the school are better than the average scores of all schools Hong Kong, so the principal should be heartened to find that pupils in this school are performing well in these two subjects. When compared with similar schools, pupils in this school still did better in mathematics, but they did less well in science.

An unambitious principal would be contented that the pupils in the school are doing well, especially in mathematics. But a more ambitious principal who wanted the school to be a leader would attempt to find out the cause of relatively poor science performance and it could be improved. Is it that the science teachers in the schools are too conservative in their

teaching methods, or is it that this school lacks good science laboratories? The principal would have to carry out separate investigations. This would require the principal to review the school's science education programme and facilities, and could require the principal to visit similar schools to see what they might be doing that would be worth copying.

Table 9.4: Results for a Relative Comparison of a School with Similar Schools and all Schools in Hong Kong

Schools	Mathematics		Science	
	Mean	SD	Mean	SD
This school				
Boys	160.3	8.1	158.6	7.2
Girls	162.5	8.3	154.6	8.3
Total	161.4	8.2	156.7	7.9
Similar schools				
Boys	159.1	7.9	159.0	8.6
Girls	157.4	8.5	154.8	7.8
Total	158.4	8.2	157.4	8.5
All schools				
Boys	150.5	10.4	151.4	10.7
Girls	150.4	9.5	149.3	9.0
Total	150.5	9.9	150.4	10.0

When the gender differences are examined, it can be seen that in this school the differences for both mathematics and science are comparable to those in similar schools. However, when compared to all schools in Hong Kong, the gender difference is larger in this school. Whether this difference is tolerable may depend on the philosophy of the school and the principal.

It should also be noted that compared to other schools, this school is distinctive in that girls do better than boys in mathematics. The fact that the pupils in this school do so well in mathematics implies that there are some very good mathematics programmes in the school, but that somehow the boys are not benefiting as much as the girls.

Since TIMSS is an international study, the authorities are often very interested in how their schools compare with all other schools in the study, or at least with the schools in nearby countries. But since the international scores were calculated using plausible values (with a mean of

500 and standard deviation of 100) while Rasch scores were used in the between school comparison in Hong Kong, we cannot simply add rows of results to the table. However, the principal can still gain a sense of the “international standing” of a particular school by combining the information in Table 9.4 with the information in Table 9.5 (extracted from Martin et al. 2000; Mullis et al. 2000).

Table 9.5: Achievement of Hong Kong Students in TIMSS 1999 Compared with International Averages

	Mathematics		Science	
Hong Kong averages	Mean	Standard error	Mean	Standard error
Boys	581	5.9	537	5.1
Girls	583	4.7	522	4.4
Total	582	4.3	530	3.7
International averages				
Boys	489	0.9	495	0.9
Girls	485	0.8	480	0.9
Total	487	0.7	488	0.7

Levels of Regional Performance

It is likely that the authorities will wish to know if there are any differences between the regions. Typical questions are:

- How does our province/region compare with other provinces/regions in the country?
- Are there any differences between schools in isolated, rural and urban areas in our region/province?

Table 9.6 is an example of differences in scores at the regional level in Grade 5 in Vietnam. There were eight regions in Vietnam, and three types of school location – isolated, rural and urban. The scores presented are Rasch scores with a mean of 500 and a standard deviation of 100. Without going into a precise definition of these types of schools, it can be seen that for Vietnam as a whole the pupils in the urban schools scored higher in reading (537.9) than did those in rural schools (494.3), who in turn scored higher than those in isolated schools (465.4). The picture was similar for mathematics. Furthermore, among the eight regions the pupils in the Red

River Delta scored highest in reading (529.6), and the pupils in the Mekong Delta scored lowest (466.1).

Table 9.6: Pupil Reading and Mathematics Scores by School Location and Region, Vietnam

Region	School location	Reading		Mathematics	
		Mean	SE	Mean	SE
Red River Delta	Isolated	493.1	13.80	497.3	23.71
	Rural	520.7	3.76	520.5	4.51
	Urban	574.4	5.51	577.8	5.53
	Total	529.6	3.42	530.2	4.05
Northeast	Isolated	467.7	9.64	471.9	9.03
	Rural	499.4	3.46	505.5	4.08
	Urban	554.8	7.75	558.5	9.86
	Total	503.2	2.91	508.6	3.46
Northwest	Isolated	450.9	13.69	460.2	14.56
	Rural	484.5	7.88	494.4	10.78
	Urban	524.5	9.14	527.9	11.02
	Total	478.6	6.18	487.3	7.90
North Central	Isolated	494.4	16.76	514.7	18.15
	Rural	503.4	5.90	514.6	5.94
	Urban	537.8	8.29	537.8	10.38
	Total	507.5	4.62	518.0	4.95
Central Coast	Isolated	450.5	13.38	461.7	9.45
	Rural	483.8	3.75	488.3	3.72
	Urban	532.0	7.52	529.4	7.34
	Total	491.9	3.75	495.4	3.63
Central Highlands	Isolated	454.0	13.48	485.7	16.32
	Rural	504.0	11.05	506.7	11.34
	Urban	532.2	11.47	531.2	9.74
	Total	500.9	7.45	508.8	7.01
Southeast	Isolated	476.2	7.05	470.5	9.52
	Rural	491.2	3.93	472.4	4.22
	Urban	533.2	5.03	526.5	4.87
	Total	506.8	3.24	494.7	3.38
Mekong Delta	Isolated	454.7	6.46	444.7	5.91
	Rural	457.9	2.86	450.4	2.21
	Urban	508.3	7.19	497.3	7.59
	Total	466.1	2.44	457.6	2.27
Vietnam	Isolated	465.4	3.92	469.9	4.16
	Rural	494.3	1.54	494.4	1.52
	Urban	537.9	2.25	534.9	2.68
	Total	500.0	1.30	500.0	1.34

In Table 9.6, the standard error of sampling has been reported together with the estimates of means. These standard errors are important when generalising from the sample to the target population. For example, if researchers wish to assess the accuracy of the mean of 466.1 for the Mekong Delta, and if they wish to be sure 19 times out of 20 or at the 95 per cent level of confidence, then they multiply one standard error by 2. The standard error is 2.44, so two standard errors are 4.88. Thus the researchers can be sure 19 times out of 20 that the real mean value lies between $466.1 \pm 2 (2.44)$ or 466.1 ± 4.88 or between 461.22 and 470.98. This in turn allows the researchers to compare scores to see if they differ by more than sampling error.

One could ask whether the pupils in the Northwest region scored higher in reading than the pupils in the Mekong Delta. The population mean for the Northwest region lies between $478.6 \pm 2 (6.18)$ or between 466.24 and 490.96. As noted, the population mean for the Mekong Delta was between 461.22 and 470.98. The lower limit of the real value of the population mean for the Northwest region was within the bounds for the Mekong Delta, and hence the researcher cannot say that the difference is greater than sampling error. So, there was no significant difference in reading scores between the two regions. On the other hand, there was a difference between the pupil mean scores for reading for the Red River Valley and Mekong Delta.

Important Information at the National Level

Typical questions posed at the national level include:

- What percentages of pupils in our school system reach different skill levels?
- What percentages of pupils reach specified benchmark levels such as “being able to cope in society” or “being able to study at the next level of education without difficulty”?
- How does our country’s achievement compare with the achievement of similar pupils in other countries?

For skill levels, an example from Vietnam has been presented in Table 9.7. The levels range from very simple tasks to quite complex tasks for Grade 5 pupils. In reading it can be seen that 19 per cent of pupils do not get further than Level 2, and it is often said that reading to function well in the society begins at Level 3. The levels were identified by the primary school reading and mathematics experts at the Ministry of Education.

They examined the Rasch difficulty levels for items in the test, and were then able to examine clusters of items at a particular difficulty level and state what it was that the items were measuring. The advantage of these kinds of analyses is that the curriculum development specialists can easily see the kinds of skills that have been mastered and not mastered by pupils in the country as a whole. The calculations could also be made for the regions and provinces.

The second kind of information referred to in the national questions is the so-called benchmark information. Again an example from Vietnam illustrates the point. In the Grade 5 survey, two benchmarks were established. The first benchmark was based on a pupil's ability to use a set of

Table 9.7: Percentages of Grade 5 Vietnamese Pupils Reaching Different Skill Levels in Reading and Mathematics

<i>Reading skill levels</i>		<i>%</i>	<i>SE</i>
Level 1	Matches text at word or sentence level aided by pictures. Restricted to a limited range of vocabulary linked to pictures.	4.6	0.17
Level 2	Locates text expressed in short repetitive sentences and can deal with text unaided by pictures. Type of text is limited to short sentences and phrases with repetitive patterns.	14.4	0.28
Level 3	Reads and understands longer passages. Can search backwards or forwards through text to for information. Understands paraphrasing. Expanding vocabulary enables understanding of sentences with some complex structure.	23.1	0.34
Level 4	Links information from different parts of the text. Selects and connects text to derive and infer different possible meanings.	20.2	0.27
Level 5	Links inferences and identifies an author's intention from information stated in different ways, in different text types and in documents where the message is not explicit.	24.5	0.39
Level 6	Combines text with outside knowledge to infer various meanings, including hidden meanings. Identifies an author's purposes, attitudes, values, beliefs, motives, unstated assumptions and arguments.	13.1	0.41

<i>Mathematics skill levels</i>		<i>%</i>	<i>SE</i>
Level 1	Reads, writes and compares natural; numbers, fractions and decimals. Uses single operations of +, −, x and ÷ on simple whole numbers; works with simple measures such as time; recognises simple 3D shapes.	0.2	0.02
Level 2	Converts fractions with denominator of 10 to decimals. Calculates with whole numbers using one operation (x, −, + or ÷) in a one-step word problem; recognises 2D and 3D shapes.	3.5	0.13
Level 3	Identifies place value; determines the value of a simple number sentence; understands equivalent fractions; adds and subtracts simple fractions; carries out multiple operations in correct order; converts and estimates common and familiar measurement units in solving problems.	11.5	0.27
Level 4	Reads, writes and compares larger numbers; solves problems involving calendars and currency, area and volume; uses charts and tables for estimation; solves inequalities; transformations with 3D figures; knowledge of angles in regular figures; understands simple transformations with 2D and 3D shapes.	28.2	0.37
Level 5	Calculates with multiple and varied operations; recognises rules and patterns in number sequences; calculates the perimeter and area of irregular shapes; measurement of irregular objects; recognised transformed figures after reflection; solves problems with multiple operations involving measurement units, percentage and averages.	29.7	0.41
Level 6	Problem solving with periods of time, length, area and volume; embedded and dependent number patterns; develops formulae; recognises 3D figures after rotation and reflection and embedded figures and right angles in irregular shapes, data from graphs and tables.	27.0	0.6

reading and mathematics skills needed to function in Vietnamese society. Those below this benchmark were described as “pre-functional”. A second benchmark was based on an estimation of a pupil’s ability to cope with the reading and mathematics tasks in the next grade of education, Grade 6, which is the first year of secondary education. The two benchmarks helped to identify three groups of pupils. Those below the first benchmark would need considerable help to enable them to function and participate fully in Vietnamese society. Those above this benchmark but

below the second would need assistance to help them cope with the reading and mathematics involved in secondary education. Pupils above the second benchmark were expected to be able to cope with the reading and mathematics involved in secondary education.

Each item was rated twice. The first was the probability that a person who could adequately function in Vietnamese society could obtain the correct answer to each item. The second was the probability that a pupil who had adequate skills to cope with Grade 6 learning could obtain the correct answer to each item. In each case, the probabilities were summed using an Angoff approach to establish the cut-off points. A detailed description of how the benchmarks were conceptualised and calculated has been given in the Grade 5 Vietnam study (World Bank 2004). The benchmarks were:

1. *Benchmark 1:* A group of pupils were described as pre-functional because they had not yet reached a benchmark demonstrating reading or mathematics required for everyday activities in Vietnamese society. The label pre-functional does not mean that a pupil is illiterate or non-numerate. There are basic skills that these pupils can demonstrate, but the skill level is not yet deemed by experts to be at a sufficient level to enable the person to be an effective member of Vietnamese society. A second group of pupils was identified as those who could demonstrate the kinds of skills needed to cope with life in Vietnam. They were found to be above this lower benchmark but had not yet reached the second benchmark. These pupils were designated as functional in terms of their capacity to participate in Vietnamese society. However it was deemed that this group would need some remedial assistance to be able to cope with the reading and mathematics required at Grade 6.
2. *Benchmark 2:* These pupils, whose performances above the second benchmark, were described as demonstrating the kinds of skills that were desirable in order to learn independently at the next level of schooling, without needing remedial assistance. The label used in the tables was “independent”.

Table 9.8: Percentages and Sampling Errors of Pupils Reaching Functionality Levels in Reading and Mathematics, Vietnam

Functionality		Reading		Mathematics	
		%	SE	%	SE
Independent	Reached the level of reading and mathematics to enable independent learning in Grade 6	51.3	0.58	79.9	0.41
Functional	Reached the level for functional participation in Vietnamese society	38.0	0.45	17.3	0.36
Pre-functional	Not reached the level considered to be a minimum for functional purposes in Vietnamese society	10.7	0.3	2.8	0.13

In Table 9.8, the results for Vietnam Grade 5 as a whole have been presented. The expectations for reading, as measured by the reading test, were higher than for mathematics, as measured by the mathematics test. Only 51 per cent of pupils in Grade 5 were deemed to be able to study independently in Grade 6 given their reading ability in Grade 5. This was important feedback to the Ministry of Education about how the system was preparing its pupils for society and for the next grade level. It was not a surprise to the authorities in Vietnam, who had been revising the curriculum for some time in order to improve the reading levels in Grade 5. How these benchmarks were met in the different regions can be seen in Table 9.9.

In Table 9.9, an extra column has been added. For the Red River Delta it can be seen that 95.0 per cent of pupils were at the functional level – the addition of the per cent functional (31.6) and the per cent independent (63.4) together make 95.0 per cent. It can be seen that the problem areas for reading were the Northwest, and Mekong Delta regions.

Although this kind of information is important, it must be recognised that only brave Ministries undertake such calculations. They are very instructive data for a Ministry to know, but could easily stimulate a member of parliament of the opposition party to ask why, after five years of schooling, 10 per cent of pupils are still at the pre-functional level of reading.

Table 9.9: Percentages and Sampling Errors of Pupils at Each Benchmark by Region, Vietnam

	Pre-functional		Functional			Independent	
			----- Reading -----				
	%	SE	%	SE	%	SE	%
Red River Delta	5.0	0.37	31.6	1.10	63.4	1.35	95.0
Northeast	12.0	0.63	34.8	0.95	53.2	1.13	88.0
Northwest	16.6	1.92	38.6	2.26	44.9	2.79	83.5
North Central	8.8	0.95	35.7	1.52	55.5	2.09	91.2
Central Coast	10.9	0.91	41.2	1.23	48.0	1.65	89.1
Central Highlands	12.2	1.78	33.9	2.16	53.9	2.95	87.8
Southeast	7.0	0.56	39.9	1.34	53.1	1.51	93.0
Mekong Delta	17.6	0.66	46.3	0.81	36.1	1.06	82.4
Vietnam	10.7	0.30	38.0	0.45	51.3	0.58	89.4
----- Mathematics -----							
Red River Delta	1.7	0.24	11.2	0.67	87.1	0.83	98.3
Northeast	3.6	0.32	18.0	0.72	78.4	0.88	96.5
Northwest	7.8	1.42	19.3	1.82	72.9	2.72	92.2
North Central	1.8	0.40	12.0	1.00	86.3	1.22	98.2
Central Coast	1.6	0.24	15.5	0.85	82.9	0.96	98.4
Central Highlands	2.9	0.60	13.7	1.59	83.5	2.05	97.1
Southeast	1.9	0.21	15.9	0.78	82.2	0.85	98.1
Mekong Delta	4.6	0.30	28.6	0.86	66.8	0.93	95.4
Vietnam	2.8	0.13	17.3	0.36	79.9	0.41	97.2

The third kind of question that Ministries often ask is:

- How well is our country doing compared with similar countries?

This is where involvement in international studies is important. The PISA study was concerned with 15-year-olds wherever they might be in the

Table 9.10: Selected Results from the PISA Study

	Mathematics literacy		Reading literacy		Scientific literacy	
	Mean	SE	Mean	SE	Mean	SE
Japan	557	5.5	522	5.2	550	5.5
Korea	547	2.8	525	2.4	552	2.7
Germany	490	2.5	484	2.5	487	2.4
UK	529	2.5	523	2.6	532	2.7
USA	493	7.6	504	7.1	499	7.3
OECD average	500	0.7	500	0.6	500	0.7

system of education. In Table 9.10, some results from the PISA study have been presented. These are of interest because countries want to know what the general level of education is likely to be for the future work force. It is quite clear that the Asian countries well outdistanced their European and American counterparts. Germany, traditionally known for its good technical work, was well down. This score provoked a big debate on education in that country.

These kinds of results only inform a country how it compares with other countries. They do not tell a country how to improve itself or even which malleable factors are most associated with variation in pupil achievement. But if this information is coupled with the skills levels approach, benchmark approach and multivariate analyses approach, then the studies can yield information of great benefit to those responsible for the system of education.

Table 9.11: Percentages of an Age Group Studying Science (SISS)

	All students final grade			Biology	Chemistry	Physics	Non-Science	Average no. of subjects studied
	Grade	% in school	Average age	% in school	% in school	% in school	% in school	
Australia	12	39	17.3	18	12	11	10	5
Hong Kong (Form 6)	12	27	18.3	12	20	20	–	6
Hong Kong (Form 7)	13	20	19.2	7	12	12	–	5
Japan	12	63 (89)*	18.2	12	16	11	35	7
Korea	12	38 (83)*	17.9	38	37	14	–	9+
Thailand	12	14 (29)*	18.3	7	7	7	7	6

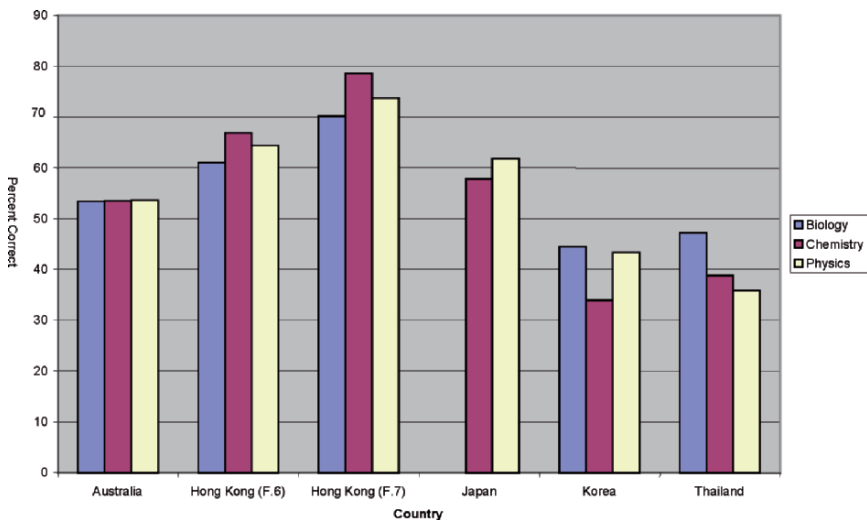
* The figures in parentheses are the percentages of students in school when the vocational students are included. However they were not tested in the study.

Returning to an earlier point, great care must be taken when there are very different proportions of a cohort still in school. This is the case with Population 3 in the IEA studies. This is usually the last grade in secondary schools; but the grade itself differs. In some countries the last grade is Grade 10, and in others it is Grade 13. In most countries it is Grade 12. Some countries have nearly 100 per cent of an age group still in school.

Others have less than 20 per cent. Where specialisation can occur in a subject matter, the percentages can also differ. For example, the percentages of those studying Science in the last grade in school in the IEA Second Science Study (Postlethwaite & Wiley 1992) have been given in Table 9.11.

The mean scores for each country in the three science subjects have been presented in Figure 9.1. The data for this study were collected in 1985, so the data must not be taken as a reflection of contemporary achievement in the last grade of school. Nevertheless, it is quite a feat to hold the information presented in Table 9.12 in the head when trying to read Figure 9.1.

Figure 9.1: Science Achievement in Selected Asian Countries



Note: Data refer to 1985.

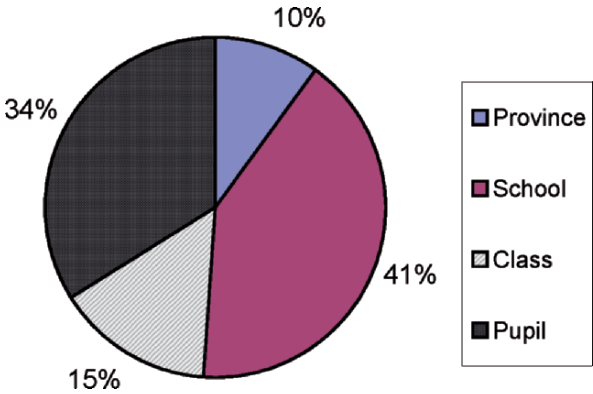
How Equitable Is Achievement among Schools?

The above results have been concerned with the *levels* of achievement in this school, in similar schools, in this region and in the nation. The Ministry of Education planners are also interested in the extent to which schools differ in the country as a whole. To what extent are differences in pupil scores a function of differences among schools and among pupils within

schools? Where intact classes have been tested, then the focus of interest becomes the extent to which the differences in scores among pupils are a function of between schools, between classes within schools and between pupils.

In the first case, an easy summary statistic is the intra-class correlation. In the Vietnam Grade 5 survey, this statistic was 0.58 – indicating that 58 per cent of the variance was between schools, and therefore only 42 per cent was within schools. But, if the interest was in, say, differences among provinces, among schools, among classes within schools and among pupils within classes, then using a multilevel analysis it was possible to show that for reading achievement in Grade 5 in Vietnam it was as shown in Figure 9.2.

Figure 9.2: Pupil Reading Achievement Variance Partitioned by Province, School, Class within School and Pupils within Classes, Vietnam



In this case it can be seen that 10 per cent of the variance was due to differences between provinces, 41 per cent between schools, 15 per cent to classes within schools, and 34 per cent to pupils within classes. This is a more differentiated picture. Strikingly, the large difference in Vietnam is between schools. Within each of these levels within a school system it is possible to determine which province, school, class or pupil variables play a role in explaining the variance within each level.

By contrast, IEA and other research have shown that the variation between schools is relatively small in Scandinavian countries and Japan at

lower secondary school. In these countries it is less than 10 per cent, meaning that 90 per cent of the variation is within schools. In Japan it becomes nearly 50 per cent at Grade 12. In other countries it is around 20 per cent in lower secondary school, except for Germany and the Netherlands where it is nearly 50 per cent. Those countries have a differentiated secondary school systems with which so far they have been content. In many developing countries the variation among schools is often 30 per cent in primary education, 50 per cent in lower secondary and 70 per cent in upper secondary school. In days when equity is considered to be important politically, countries often want to know the variation between schools.

Conclusions

This chapter has provided information about the problem of measuring achievement to be used for comparing pupils, schools, provinces or regions within a country and countries. At the country level it dealt with information concerning skill levels, benchmarks and overall scores.

The construction of the achievement measures is very difficult. If this hurdle is overcome and the sampling and data collection are well conducted, then the information can be of great use to the educational planners. However, care must be exercised when comparing countries, especially at the end of secondary school where many features of the target populations are different.

Whereas comparing achievement is an important first step in these kinds of studies, it is only a first step. No nation is good at everything: they all have their strong and weak points in achievement. But they also want to know what they might do to improve education in one or more aspects. For this they need to know which variables are associated with variation in achievement so that they can think of what action to take to ameliorate the situation. This means that the studies have to be designed in such a way to measure likely factors in the system that might be associated with achievement variance among pupils, among schools, among regions and among countries. But, how to do that is another story!

Comparing Policies

Yang RUI

The word policy is commonly used in government documents, academic writings and daily conversations. However, the nature of policy and the ways in which it can be researched, interpreted and produced are open to debate. The literature that might assist in this matter is diverse, divided and to some extent inconclusive. In the words of Ball (1994, p. 15), it contains “theoretical uncertainties”; and answers to some questions and raise others.

Nevertheless, it is important to address these questions, in part because debates about educational policy in many parts of the world are becoming more intense. An increasing duality has become evident. On the one hand, the way policy is made is highly contextualised and its implementation even more context-dependent; and on the other hand, policy travels globally and has profound impact in locations far removed from its origins. In such circumstances, comparative research on education policy is growing in relevance and interest.

This chapter discusses theoretical and methodological issues in comparative analysis of education policies. It begins with a description of the international policy context, and then moves to debates about the definitions of policy. The chapter also illustrates ways in which education policies can be compared.

The Changing International Policy Environment

Policy does not exist in isolation. Since World War II, dramatic changes in the international policy environment have had a direct impact on how social policies are made, implemented and researched. The changes have

of course been different in different parts of the world. The remarks that follow apply particularly to industrialised countries.

The first change has been economic. World War II was followed by an unprecedented boom during which many societies experienced strong economic growth for nearly 30 years. The period ended in the mid-1970s and was succeeded by slow growth or stagnation. During times of slow growth, citizens become increasingly reluctant to pay taxes. Since the late 1970s, first the USA and then some other English-speaking countries have seen a series of low-tax movements and tax rebellions. Within such a climate, politicians have tried to reduce spending on public services.

The second change has been demographic, which significantly changed the composition of populations in the major wealthy societies. One demographic phenomenon has been the baby-boom generation – people born between 1946 and 1964. As babies, as teens and as young adults, this segment of the population had enormous impact on their nations. With the baby boomers reaching their 50s and starting to think about retirement, political leaders have needed to think about health care costs. Significant funds, both private and public, will have to be invested in the aging populations over the next 25 years, thereby reducing the money available for other public services.

The third change has been ideological. Over the last 20 years, a major shift in political ideas occurred first in the USA and the UK, then in other parts of the English-speaking world, and then in many other locations. In general, the focus of politics shifted from equality to excellence, accountability and choice. Business leaders often advance these ideas in policy debates. They sometimes sound as if they discern no difference between public and private institutions, and they criticise public services for their alleged inefficiency and insensitivity to the market. The ideologies of both the business community and the Religious Right lead them to be sceptical of government initiatives. Public services are a part of the government and are therefore automatically defined as part of the problem.

The fourth change has been the nation-state framework. Globalisation has blurred the boundaries between nations and civilisations. The current global world system is different from the traditional international world system in which nation-states were the most important and powerful players. Nation-states can no longer tightly control the global flow of people, information and capital. Increasingly, transnational events are out

of the control of nation-states, which therefore have less power. Some forms of traditional government politics can only operate well within the nation-state framework. National policies have demonstrated increasing limitations, while transnational forces and players have received increasing prominence.

The fifth change has been increased individualisation, which threatens public agencies and politics. The post-nation-state era is confronted with both a decline of political forces and the opulence of individualisation. The former is caused by global capitalism and paves the way for further individualism, while the latter leads to further decline of political forces. Nowadays, there are neither clear identities of political parties and nation-states, nor universal social trust. Within this context, traditional government political structures are losing their capacity for integration.

The final change has been a sense of uncertainty and lack of trust in political decision makers. In recent decades, people, particularly in the West, have gradually abandoned their strong belief in human rationality and the notion that knowledge is power or strength. Instead, people increasingly recognise uncertainties. Some even believe that human knowledge is a disastrous power. This sense of uncertainty leads to scepticism towards technocrats and political decision makers.

Understanding Policy: Two Perspectives

The term policy derives from political science, which is itself a deeply divided discipline (Almond 1990). Partly because of philosophical conflicts over the nature of individuals and society, people have different understandings of the meanings of power and the proper roles of government. Their perceptions of the meanings of policy, policy making and implementation differ accordingly (Fowler 2000).

In the literature, and also in practice, there is no single recipe for policy analysis (Taylor et al. 1997, p. 36). Rather, various approaches have been adopted in analysing policies according to the analysts' different purposes. Understanding what policy is largely determines ways of doing policy analysis (Ball 1994, p. 15). In order to compare policies, it is important to understand what policies are. Although much literature attempts to define policy, policy is a complex concept and achieving a definition is not easy. Cunningham (1963, p. 229) once suggested that policy was like an elephant – you recognise one when you see it, but it is somewhat difficult

to define. This elephant metaphor also applies to the Indian fable, *Six Blind Men and an Elephant*, showing the direct link between a philosophical stance and the definition of policy. Hogwood and Gunn (1984) identified nine possible contexts in which the word policy was used: a label for a field of activity, an expression of general purpose or desired a state of affairs, specific proposals, decisions of government, formal authorisation, theory or model, programme, output and outcome. They proposed a tenth category of "policy as process" (p. 19).

Policy can cover a very broad arena and can be understood and used in various ways, including plans, decisions, documents and proposals. In addition to written forms, policy can include actions, practices and even the inactions of governments. The most popular of these definitions, amongst policy researchers and the public at large, are those that define policies as documents. Expanding the broad identification of policy documents, these representations can take various forms at different levels: most obviously official legal texts and policy documents; formally and informally produced commentaries which offer to make sense of the official texts; the speeches and public performances of relevant politicians and officials; and official videos (Bowe et al. 1992, pp. 20–21).

Taylor et al. (1997) classify policies into distributive or redistributive, symbolic or material, rational or incremental, substantial or procedural, regulatory or deregulatory and top-down or bottom-up. Much depends on how allocation of resources or benefits is made, the extent of commitment to implementation, and the existence or otherwise of prescriptive stages for the development of policy. Such classification helps to define policy, although parts may be rather arbitrary.

Another classification, although increasingly blurred, is between public and private policy. The public sector represents a group of institutions which rely on, or justify their activities in terms of, the authority of the state. The public sector is more exposed to political direction and scrutiny than the private sector. It is characterised by public accountability, which extends to the performance of all state functions, and is enforced in a variety of ways ranging from the administrative to the electoral. At least theoretically, the public sector is based on the principle of equality of treatment of citizens. The concepts of ownership of enterprise and profits have been traditionally missing from the public sector. Finally, the idea of a public sector embodies the principle that all public authority must only be used in the public interest. This contrasts with the scope for individuals

and companies in the private sector to do anything that is not forbidden by the law to maximise their own advantage.

The focus of this chapter is on public education policy, which is produced by government or arms of government, for the benefit of the public. Public policy is usually collective and cannot be easily separated as economic, environmental and educational. It is at the centre of major political struggles between those who see it only for its instrumental outcomes and those who see its potential for human emancipation.

As Dahrendorf (1959) explains, society has two faces: conflict, that is, conflicts of interest; and consensus, that is, value integration in society. Sociological theories can accordingly be classified into consensus and conflict perspectives (Jary & Jary 2000). Likewise, researchers have rational and conflict perspectives for viewing policy.

The Rational Perspective

The rational perspective, also referred as the traditional model of policy development and analysis, emphasises the technically best course of action to implement a decision or achieve a goal. Such a technology of decision making in the public sector enables governments to make the most cost-effective decisions. This positivist view believes in a value-neutral manner to avoid or simplify the political complexities. It largely ignores the issue of power and the way in which the state might exercise it. Its theoretical basis dates back to August Comte (1798–1857), who called sociology “social physics” and insisted that the methods from natural sciences, including observation, experiment and comparison, should be used to study society.

In analysing decision-making processes, Simon (1960) proposed a rational policy production theory that was closely related to the stages of problem-solving first described by Dewey (1910, p. 3): “What is the problem? What are the alternatives? Which alternative is the best?” This method of making decisions involves selecting from the alternatives that “will lead to the most complete achievement of your goals” (Simon 1945, p. 240). It entails the choice of the “best” course of action from all possible options, achieved through a systematic and sequential process.

The rational perspective sees the policy process as a sequence of events that occurs when a political system considers different approaches to public problems, adopts one of them, tries it out and evaluates it. It suggests that the policy process is orderly and rational. It reflects functionalist assumptions about the way society works: underpinned by a

value consensus and the various institutions in society contribute to the ongoing stability of the whole. It conceptualises policy in distinct and linear phases: from policy development or formulation to implementation and evaluation.

A version of the rational model in the political science context was described by Anderson (1984, p. 26) as having the following sequential steps of the policy process: (1) problem formulation including what policy problem is, what makes it a public problem and how it gets on the government agenda; (2) formulation including how the alternatives for dealing with the problem are developed, and who participates in policy formulation; (3) adoption including how a policy alternative is adopted or enacted, what requirements must be met and who adopts policy; (4) implementation including what is done, if anything, to carry a policy into effect, and what impact this has on policy content; (5) evaluation including how the effectiveness or impact of a policy is measured, who evaluates policy, what the consequences of policy evaluation are, and what demands are for change or repeal.

In singling out “policy as process” as their preferred definition, Hogwood and Gunn (1984, p. 19) compared the nine usages of policy they identified to still photographs – the statement of an objective, the moment of decision, a Bill becomes an Act, and so on. They suggest the desirability of the equivalent of a film which will permit study of the unfolding over time of the complexities of the policy making. They go on to prescribe a policy-making framework and divide the process into nine stages: deciding to decide (issue search or agenda-setting); deciding how to decide (or issue filtration); issue definition; forecasting; setting objectives and priorities; options analysis; policy implementation, monitoring and control; evaluation and review; and policy maintenance, succession or termination.

Although this account seems to provide a clear framework to understand and investigate policy processes and how policy is made, the rational model has met much criticism because it suggests that the policy process is more orderly, has clearly defined stages and is also more rational than it really is (Lindblom 1980; Ball 1990; Cibulka 1995; Taylor et al. 1997).

The idea of dividing the process into clearly defined stages encountered substantial criticism because each stage itself involved complex processes. Even in the first stage, agenda setting, different people with different values and interests have different ideas about what should be

on the policy agenda, what logic should inform the agenda, who decides on the policy priority agenda and how the decision is made and why. Therefore, decision makers are not faced with concrete, clearly defined problems because the rational model neglects the political nature of decision making (Lindblom 1980).

Moreover, it is unrealistic to consider all possible alternatives and make a decision on which is the best option because there is always room for improvement. Furthermore, in reality some decisions are made arbitrarily and illogically. These analyses of the first two stages show that they are closely related to each other and that agreement among different people cannot be reached easily. Their many uncertainties and complexities mean that they are almost impossible to separate from each other.

As for the last stage of policy, while some policies may be purposely "terminated" by other decisions or by new policies, the effects or the influences of terminated policies do not necessarily come to an abrupt end. Sometimes their influences can last for quite a long time, and some effects, once realised, are hard to reverse. Even new policies can be greatly influenced by or derived from old ones. Furthermore, the effects of some policies fade away for various reasons, even if their makers are reluctant to admit this.

Intending to avoid the drawbacks of the rational model, Lindblom (1959) proposed an incremental approach to decision making. The major difference between an incremental approach and a rational approach is that the decision maker considers only some of the alternatives for dealing with a problem, and for each alternative only a limited number of important consequences are evaluated. Lindblom argued that incrementalism was a good description of how decisions and policies were actually made. He claimed that one advantage of "muddling through" was that serious mistakes could be avoided if only incremental changes were made because it was easier to reach agreement when dispute existed among various groups. Compared with a rational model, incrementalism is more realistic because it recognises the limitations of time, intelligence and other resources in policy-making processes. Lindblom (1980) pointed out that the policy process was extremely complex, without beginning or end and with uncertain boundaries.

The incremental approach has also met much criticism for being too conservative, helpless in dealing with crisis, and hence a barrier to innovation. Trying to avoid the weaknesses of rational and incremental models by combining the strongest features of the two, Etzioni (1967, p. 389)

put forward the approach of “mixed-scanning”. His strategy was to include elements of both approaches by employing two cameras: a broad-angle camera that would cover all parts of the sky but not in great detail, and a second one which would zero in on those areas revealed by the first camera to require closer examination. This was described by Smith and May (1980) as the “third” approach, providing policy makers with both rational and incremental approaches in different situations. It seems logical, because in practice it is not easy to decide which approach – rational or incremental – is most appropriate under specific situations.

Some argue that policy is both product and process, making it ongoing and dynamic, and more complex, interactive and multilayered than in rational models (Taylor et al. 1997; Wildavsky 1979). They suggest that policy processes accrue both prior to the production of a policy text and afterwards, through the stages of implementation and reinterpretation (Taylor et al. 1997, p. 25). This means that the text of policy, often in the form of written documents, is by no means the end of policy making. The process of creating a final text is difficult enough. It is usually very hard to tell the specific reasons or intentions for initiating such a policy; and even if the reasons or intentions are clearly stated, they may not be the actual ones.

The research by Bowe et al. (1992) emphasised the importance of contexts, and showed that policy is different in different contexts. In the context of influence, policy can be understood as intentions, ideas, aims, purposes, objectives or plans; in the context of policy text production, policy can be written texts, products, documents and articles; and in the context of practice, policy can be actions, performances and activities. Indeed, policy can mean even more than these specific things, and involves various actions and processes. Bowe et al. argued that recognising policy as a process places it in continuous, interrelated and reciprocally influenced contexts, which should also be taken into consideration in policy making and analysis. Policy is an outcome of the aggregate forces of all the three contexts. While each context is strongly related to process, the impact and effects of context are in practice different and unequal. For example, the influence from the context of practice is often not as strong as that from the context of influence. Such differences and inequalities of weight in policy making are derived from the nature of policy – an act of politics itself, something that has been well explained in a “conflict” perspective for viewing policy.

The Conflict Perspective

Critical theorists take a conflict approach. They see society as consisting of competing groups with different values and access to power. According to them, policies do not emerge in a vacuum, but reflect compromises between the competing interests (Taylor et al. 1997, p. 5). Thus, policy problems are too complex to be solved in simple technicist ways, and policy processes are interactive and multilayered. Critical theorists emphasise that the two words policy and politics came from the same root, and that policy necessarily involves politics. Here, politics, with a small “p”, is about imposition of one interest over another, not necessarily about political parties.

A conflict perspective emphasises that authority “invariably becomes the determining factor of systematic social conflicts” (Dahrendorf 1959, p. 165). Conflict theorists highlight the role of power in maintaining social order. According to them, various positions that individuals inhabit within society have different amounts of authority, and some positions have more power and authority than others. However, a person of authority in one setting does not necessarily hold the same amount of authority in other settings. A conflict of interest is latent at all times, and “the legitimacy of authority is always precarious” (Dahrendorf 1959, p. 268). Society experiences continuous social conflict because it is composed of individuals, groups and institutions with distinctive and conflicting interests. Authority shifts constantly among different settings (Ritzer 1996). Policy is never static or permanent. It is valid only in certain contexts and within certain periods of time.

Fowler (2000) points out many similarities between policy processes and games as follows: both have rules and players; both are complex and often disorderly; both are played in many arenas and involve the use of power; and both can have winners and losers (see also Bourdieu & Wacquant 1992). While “fairness” is what the players pursue in real games as in the game of policy, “what is fair” is not always decided by all the players. Fair for some players may be unfair to others. Policy is defined by the “rules of the game” (Offe 1985, p. 106). But questions such as who makes the rules, how the rules are made, why the rules are made that way and whether or not these rules are made fairly, raise further questions about individual values, interests and priorities.

At the institutional level, the power relations of policy settlements are “systematically asymmetrical”, that is, “different individuals or groups have a differential capacity to make a meaning stick” (Thompson 1984,

p. 132). Particular groups of people are institutionally endowed with power, while other groups are excluded or remain unable to access power. Due to the political nature of policy, "only certain influences and agendas are recognised as legitimate, only certain voices are heard" (Ball 1994, p. 16). Policy is the outcome of conflict and struggle between interests in context.

Policy only represents the values of the interest group that possesses the authority in policy making, although it often presents itself as universal, generalised and even commonsensical. Its interests and influence are invariably partial (Gale & Densmore 2003, p. 38). It then makes sense to represent policy as the authoritative allocation of values. As Prunty (1985, p. 136) argues, this view of policy "draws our attention to the centrality of power and control in the concept of policy; and requires us to consider not only whose values are represented in policy, but also how these values have become institutionalised".

Adopting a conflict view, Ball (1990) has argued strongly that policy by no means stands for a consensus opinion of all social members. Policy making, he suggests, never follows a rational or logical sequence. Rather, policy is derived as the consequence of endless struggle and compromise between various interest groups, and eventually makes a symbol of the dominant values of the group with authority. The values do not float free of their social context, and it is therefore important to ask whose values are validated in policy, and whose are not. Indeed, it would be both theoretically naïve and politically abhorrent to suggest that the policy process is democratic and that policy is produced through mutual agreement of elected representatives (Gale 2003, p. 52). The conflict among different interest groups is the everlasting dynamic leading to change in society. The public decision maker is usually confronted with a situation of value conflict rather than value agreement.

The research by Bowe et al. (1992) further reveals that interpretation of policy is a matter of struggle. Practitioners interpret policy with their own histories, experiences, values and purposes. Their responses to policy text are often constructed on the basis of "interpretations of interpretations" (Rizvi & Kemmis 1987, p. 14). It is very hard to control or predict the effect of a policy and new possibilities and opportunities. This confirms the view expressed by conflict theorists that policy practitioners have unequal authority in different contexts. Legislators who have authority in the context of influence may lose (some of) their authority in the context of practice. The authority shifts from context to context, and this is

why policy effects are often quite unexpected and different from policy intentions. The authority that practitioners have endows them with power to interpret policy according to their own understandings, which can be quite different and even opposite to those of the policy initiators.

In brief, the conflict perspective sees policy making in complex societies as often unempirical and illogical, although policy makers almost always claim otherwise. This conflict perspective is consistent with critical policy analysis which aims to identify who is advantaged, and who is not, by new arrangements. There is a fundamental need to explore the values and assumptions that underlie education policy by asking questions such as who are the winners and losers, and how their values are institutionalised (Taylor et al. 1997, p. 37).

Making Sense of Comparing Education Policy: Uses and Abuses

In the context of globalisation, the concept of policy borrowing has always been central to the work of comparative education researchers (Phillips & Ochs 2003). Global policy agendas are steering education research as a means of shaping socio-economic development within countries. A growing body of literature has discussed the increasingly intense cross-national travel of education policy. This literature is concerned with patterns in which knowledge about policies, administrative arrangements, institutions and ideas in one political setting is used in the development of policies, administrative arrangements, institutions and ideas in another political setting.

Contemporary changes in geopolitical relations combined with the implications of the intensification of globalisation have heightened the significance of such relationships to the extent that the very conceptualisation of problems in comparative and international research needs fundamental change (Crossley & Watson 2003, p. 48). Globalisation provides a new empirical challenge as much as it does a new theoretical frame for comparative education.

A variety of uses and abuses of comparative education policy studies may be identified, despite the lack of a clear dividing line between them. Best uses and absolute abuses are two extremes of the same continuum. Uses of comparing education policy studies have their prerequisites. Without meeting these prerequisites, uses commonly turn out to be abuses, which can easily be found in contemporary comparative studies

in education policy. The examples used here concentrate on the study of education policies in China in order to be more focused. In consideration of the length of this chapter, four major issues are addressed in the following section to make sense of comparing education policy. The issues are context; the dominance of Anglo-American scholarship; the limited use of statistical methods and lingering biases.

The All-Important Context

Context is of great importance to comparative research in education policy. Many distinguished comparativists have long pointed out that major problems lie in any simplistic transfer of educational policy and practice from one sociocultural context to another. To cite Sadler's (1900, p. 310) seminal lecture:

We cannot wander at pleasure among the educational systems of the world, like a child strolling through a garden, and pick off a flower from one bush and some leaves from another, and then expect that if we stick what we have gathered into the soil at home, we shall have a living plant.

This quotation is so well known in the field that the modern period of comparative education is widely considered to start from Sadler. The field has always paid close attention to social, cultural, economic and political contexts. Looking into the future, the diverse and multidisciplinary traditions of comparative and international education make it especially well positioned to deal with the increasingly complex, global and cross-cultural issues that characterise the 21st century. The field has long recognised the significance of global forces in educational research and development, and has consistently examined the dilemmas associated with the transfer of educational policy and practice from one cultural context to another.

Globalisation has seriously challenged the way education policy is compared. This is because contemporary globalisation is reconstituting or "re-engineering" the power, functions and authority of national governments (Held et al. 1999, p. 8). Given the changing global order, the forms and functions of the state have to adapt as governments seek coherent strategies to engage with a globalising world. Governments have become increasingly outward looking as they seek to pursue cooperative strategies (Rosenau 1997). At the same time, global agendas can only take effect when they are inserted into the policy and governance processes of es-

established decision-making domains within nation-states. As Arnove (2003, p. 3) puts, there is a dialectic at work by which these global processes interact with national and local actors and contexts to be modified and transformed. There is a process of give-and-take, an exchange by which international trends are reshaped to local ends.

Such interplay between the global and the local, denominated as the “global-local nexus” in the globalisation literature (Robertson 1992, p. 100), gives further measure to contexts, both local and global, in comparative education policy studies. Policy can only be understood, made and analysed in certain contexts. Hence, analysing policy is as much about understanding policy context as it is about understanding policy and policy processes.

With the increasing presence of policy networks and the geographical and conceptual border crossing of policy elites, efforts to globalise educational institutions have brought commonalities in the discourse on educational policy. However, this does not necessarily imply a transnational convergence of policy and practice in educational institutions. Rather, when global trends are encountered in the local context, some form of hybridisation results from a combination of elements to make up the final programme package for policy transfer (Well 2005). The convergence or divergence one sees in education is the product of conscious adaptation, blind imitation and pressure to conform (Stromquist 2002). Policies have undergone many transformations by the time they reach local educational institutions. The substantive elements of one programme, although successful in one location, may require a fundamentally different delivery mechanism for it to be effective in another. This “missing piece” can be copied or emulated from a second location.

It is then erroneous to see the exponential rise of international policy transfer and convergence as a global trend in education. For example, uncritical policy borrowing across national boundaries has been evident in China’s higher education. However, the importance of not glossing over the complex and often contradictory national and local mediations of “global” policy trends must be stressed, since context-specific policy differences are forged. China’s policy researchers have actively engaged with globalisation, but perhaps in a relatively uncritical manner. This suggests a need for caution and for a careful examination of the trajectories of education policy in China. There is a constant need to navigate the local within the global as policies evolve. The processes of globalisation are complex, contested and often contradictory. The concept of globalisation,

when it implies policy homogenisation, is arguably too blunt an instrument for critical analysis of education reforms. Too few studies on globalisation processes are grounded in detailed examinations of particular historical times and geographical spaces (Yang 2002).

The critical role of context also undermines nation-states as the dominant unit of analysis in comparative studies in education policy. Policy transfer is not an independent process but is part of the wider policy process and shaped by such a process. While policy transfer primarily involves the state, other key factors, including international organisations, play a part.

The notion of the nation-state is increasingly open to question, and intensified globalisation has challenged the prominence of the nation-state as the primary unit of analysis in comparative studies in education policy. Global forces are dramatically changing the role of the state in education, and demanding increased attention to factors operating supra- and sub-national levels. National cultures can and do play a significant role in mediating global influences, but greater recognition is being given to other units of analysis (Bray & Thomas 1995; Bray 2003b). Units of analysis that pay attention to the local effects of localisation should be prioritised.

For example, it can be very misleading to treat China as a single entity in comparative higher education studies. Disparities receiving higher education between China's different geographical areas and social classes are evident. While 30–40 per cent of the age cohorts in major cities have an opportunity to receive higher education, the percentage in remote areas is between 3 and 5 per cent. Disparities between urban and rural areas and between the rich and poor have historically been a long-standing issue in China. The gap has widened since the late 1970s when China opened itself to the world and exploited the coastal east.

Correspondingly, higher education development has been imbalanced: while between 1978 and 2000 the proportion of students grew rapidly in Beijing, Shanghai and Tianjin, the difference between these major centres and the remote areas including Tibet, Gansu, Qinghai, Ningxia and Guizhou widened. With the move towards marketisation, the capacity of local governments in financing their higher education development in more affluent areas such as Shanghai and Guangdong was often three times more than that in the inland provinces (Xie 2001, p. 215). Higher education developed far more vigorously in the thriving export-oriented coastal zones than that in the interior.

The Continuing Dominance of Anglo-American Scholarship

The international knowledge system of people and institutions that create the knowledge, and of structures that communicate knowledge, has divided nations into centre, semi-centre and periphery (Altbach 1998, p. 193). Its function has been substantially strengthened by the exponential growth of the internet (Farquhar 1999), and by the fact that English has become a global language (Crystal 1997; Watson 2001c; Yang 2001). In many ways, knowledge that is not part of Western networks in mainstream journals, books and other indices of academic production is not considered to be real knowledge. The most recent innovations in scientific communications, databases and information networks are also located in the industrialised nations, especially in the USA. The worldwide scientific communications system is centralised and dominated by the research-producing nations.

The unequal international knowledge network has been manifested in comparative education policy studies. It is ironic that comparative education policy studies, as a field of research claiming to be defined by cross-cultural pursuits, can still be “impressively parochial” (Cowen 1996, p. 165). This reflects the substantial dominance of Anglo-American scholarship in the English language. As Welch (2003, p. 303) pointed out, this fact has long been lamented by European, Latin American and Asian scholars whose first language is not English. It means that significant theoretical tributaries from such regions, and even more so from the Middle East and Africa, often become only partly visible and after significant delays. Many indigenous theoretical contributions from such regions are marginal in mainstream comparative studies in education.

Since the effects of globalisation differ from place to place, attention needs to be drawn back to the nature and implications of the differential effects, even at the national level. Nevertheless, as noted above, few empirical grounded studies have compared these differences in any sustained way. Those that have been carried out have largely focused on Western industrialised societies. The impact of globalisation on the poorer, postcolonial societies of the “South” has received much less attention, despite the dramatic implications for development processes in such contexts. For example, in today’s interdependent wired world, the commitment by universities to advancing human knowledge means that they must engage in heightened international cooperation. Scholarship and teaching require an international approach, to avoid parochialism and to

stimulate critical thinking and enquiry into the complex issues and interests that bear on the relations among nations, regions and interest groups.

Meanwhile, against a backdrop of the aforementioned hierarchy of Anglo-American knowledge and the English language, Asian countries including China are competing for leadership in the global, technologically oriented knowledge economy. A critical mass of non-Western scholarship is emerging, and beginning to force a reconsideration of traditional concepts and theories (Masemann 1997; Bray & Gui 2001). Important research is now done at more centres of scholarship than ever before, helping to offset the hegemony of European and North American scholarship (Arnove 2003).

It is thus useful to study higher education policy in different countries, especially in Asia, to facilitate understanding of changing higher education landscapes. The striking economic success of East Asian countries includes a key focus on education, especially plans to develop world-class universities. The rise of Asian universities has potential to alter the world higher education landscape.

With the dominance of Anglo-American knowledge, Chinese policy researchers are increasingly looking to North America for ideas about institutions and policies and about how they work in other jurisdictions. Their references illustrate this well. Of the 114 education policy research articles carried during 2003–2004 by the *China Renda Social Science Information Centre-Education*, a significant Chinese journal that selects the best articles from a wide range of education journals nationwide and reprints them monthly, each article contained an average of 7.1 references. Among the cited items, 20.5 per cent were translated works, of which 159 (19.8% of the 803 listed references) were originally in English. The references in foreign languages numbered 71, among which 67 were in English (Yang 2006). The increase of foreign-language references was dramatic, and an increasing number of articles relied almost exclusively on English-language resources.

While the dominant Western (mainly American) policy research and theoretical constructions have propelled China's policy research forward, a shortage of comprehensive, systematic studies of the imported Westernised theories and methods has led to superficial, fragmentary understandings of them. In practice, the application of these seemingly "advanced" theories and methods often ends up with a blunder (Chen 2000). Without deep knowledge of their localities, indiscriminate use of Western theories and methods has failed to help China define, recognise and

formulate policy problems, let alone provide effective solutions (Hu 2000). The identification of wrong problems could be a fatal mistake in policy analysis (Dunn 1988; Dryzek & Riply 1988).

This pattern poses a threat to the much-needed movement towards indigenisation in China. Policy research in that setting needs to understand both the strengths and the limitations of Western theories and methods, resulting from their specific times and spaces. Instead of making remarks as outsiders, Chinese policy researchers need to develop their unique perspectives and values based on rich local experience. This is an awareness of their local society and culture. Such a sense of locality would allow Chinese policy researchers to seize the initiative in identifying the real needs of their local societies, and to set up their own research agendas and targets.

The Limited Use of Statistical Methods

Comparative education policy study is a field characterised by eclecticism, despite pleas for coherence of focus and method (see, e.g. Cummings 1999). It incorporates a range of theories and methods from the social sciences and intersects with a range of subfields including political science, sociology, anthropology and economics (Wilson 1994; Rust et al. 1999). Positions within the field range from modernist certainties with essentialist views of reality and identity, to postmodernist destabilisations which view identity as mutable; from approaches which problematise systems to those which problematise actors; and from paradigms which emphasise structural relations, to those which focus on simulations and hyper-reality (Paulston 1999).

The last two decades of the 20th century were in many ways dominated by economic concerns that had a major influence on social and educational trends and priorities worldwide. The focus of much social science research thus reflected the nature and tone of the dominant economic discourse, and the competitive assessment and accountability culture that it generated. Comparative studies in education policy have been progressively oriented towards training needs, skills development strategies and the promotion of an efficient and adaptable workforce (Marginson & Mollis 2001). Much attention has been paid by policy makers, across a variety of contexts both in the North and the South, to the implementation of educational reforms, providing a focus for much comparative education policy research.

Some leading figures in the field have emphasised this. For example, Bray and Gui (2001) challenged much of the English-language literature by demonstrating the cross-cultural limitations of the generic Western phases formulated to represent the history of the field as a whole. They reminded readers of the work by Gu (2001), which contrasted strongly with the more empirical "scientific" paradigm used to represent the post-World War II period by writers such as Noah and Eckstein (1969, 1998).

The character of policy and its making and the nature of policy analysis determine that statistical data are *not* much used in comparative studies of education policy. This is for several major reasons. First, raw statistics ignore the human and cultural dimensions of societies, which for many comparativists are at the heart of what they are studying. Second, the gross national product and per capita income data that are used by agencies such as the World Bank and United Nations Development Programme to classify countries are typically national data and are essentially aggregated; they ignore regional variations and ethnic and linguistic disparities. Third, much is predicted on the belief that the key data source on population figures – the national census – is accurate. This cannot necessarily be guaranteed (Ninnes & Burnett 2003).

According to Neuman (2003, p. 140) "qualitative research relies largely on the interpretive and critical approaches to social science", and critical researchers usually "give the historical context a major role, critique social conditions, and reveal deep structures of social relations". Taylor et al. (1997) argue that "policy research is aiming to unravel the complexities of the policy process", and that "a qualitative approach is most suited to policy analysis" (p. 41). Qualitative researchers build theory by making comparisons. They "emphasize the social context for understanding the social world" (Neuman 2003, p. 146). The meaning of social action or statement depends largely on the context in which it appears. The social meaning and significance will be distorted, if social contexts are not taken into consideration. Policy can be quite different in different contexts.

In the Chinese circle of education policy research, however, most researchers hold an objectivist view. They believe that understandings and values are objectified in the people who are studying. Academic publications and official policy texts have demonstrated this belief: if they take the right approaches, it is argued, they can discover the objective truth. This is also in line with the official stance (Shi 2004), although the

reality of China's education policy research is a mix of traditional Confucian ethical sermon, Chinese interpretation of Marxism, and policy explanation and/or justification in line with governments (Xu 2002, p. 450).

Internationally, preponderance to positivism and inadequate conceptualisation of the role of subjective perception and judgement has increasingly been recognised as a shortcoming in the literature (Dolowitz & Marsh 1996). People are becoming dissatisfied with the inability of Western science to describe all that occurs in people's experiences of the world. Some have launched passionate attacks on the "paradigmatic tyranny" of the natural sciences (Rahnema 2001), turning their thoughts to indigenisation. While the calls for indigenisation provide China's social scientists with a unique opportunity, China's education policy studies have displayed a positivist picture, demonstrating that Chinese researchers are attempting to emulate the Western objectivist epistemology.

Lingering Biases

A major issue that needs to be recognised by those carrying out comparative studies in education policy is that of bias. For much of the 20th century, the field of comparative education was dominated by Eurocentrism. At the outset of the 21st century, the fluidity associated with increasing globalisation calls for greater appreciation of alternative perspectives which redress the biases inherent in those previously dominated by Europe and North America. Many scholars in the field originated in the West, while many non-Western researchers were trained in Western institutions. Their research interests were, for the most part, motivated by the normative concerns to improve their own educational systems and modernist desires to help the "South" to achieve development.

Bias may be based on researchers' prejudices, or their implicit values and preconceptions. For example, Pan (1999, p. 1676) used China's most influential works on comparative higher education translated from English, Japanese and Russian as examples to show convincingly that all the authors were subject to their ideo-political stances. Comparative education policy researchers are all conditioned by their upbringing, culture, education, environment, status and perceptions of how others view them, as well as by their political, social and religious values and attitudes. All researchers, but especially those involved in research on the travelling of education policy across cultures or across national boundaries, need to be aware of such potential biases and assumptions that they bring with them. Inevitably this will influence how they view the "other", and how they

document the similarities and differences that they perceive in different cultures. Such biases are not always easy to recognise, let alone overcome.

Bias may also stem from the way in which existing data are formally presented. In other words, it can be both personal and "official". Government statistics, publicity brochures and official publications often portray systems or countries in the most favourable light. In the international arena, a country which wants to attract overseas development assistance may show the economic or educational picture to be worse than it is; but if it wants to impress foreign investors or its own electorate, it will portray things to be better than they really are.

Moreover, much comparative education policy research is now commissioned by governments, international organisations or private educational charities. These each have their own agendas and often want to commission consultants or researchers for their own ends, either to propagate particular theories or to advance a set of policies (Samoff 1996).

One related yet somewhat different issue concerns a distinction between government policy rhetoric and reality. This is particularly the case in China with a tradition of the Chinese ancient scholar-gentry as a tool in the service to the ruling class. None of the 114 policy research articles published in the aforementioned journal offered any real criticism of the government (Yang forthcoming). On the contrary, many sang the praises of government policies. While going much further, the Chinese situation confirms Popkewitz and Lindblad's (2000) criticism towards the literature in general that education policy research tends to accept the discourses of policy as the governing structures for research, and becomes bound to the policy makers' definition of the problem, taking the categories and problem definitions derived from governmental policies as the problems of research without any serious intellectual scrutiny.

Such a shortage of independent, critical thinking also results from lack of awareness of the above issue. In this regard, Pan's (1999, p. 1677) seminal warning, which first appeared in 1991, remains appropriate today:

Attention should be paid to comparing the actual practice in different countries, rather than only the analysis of their policy documents. Policy documents are an important source, but not the only one. What is written in policy documents manifests the intention of the governments, and is usually far from the reality. Such difference is even more striking in countries with less centralised educational

systems Entire reliance on government policy documents would be very misleading We have to pay close attention to analysing information from all possible sources to gain a understanding that is more geared to actual circumstances, even if they might be odd bits and appear to be contradictory to each other.

Conclusion

It is worth reiterating Ball's (1994, p. 15) emphasis that the meaning given to policy affects the ways in which researchers undertake their work and interpret what they find. However, policy is so difficult to define that Kenway (1990, p. 6) suggests it is more productive to think about "the policy process", which involves a great deal of settlement, mostly political as well as economic and social, and is replete with differences in value orientation and unequal power relations. Policy is thus a process fraught with choices, and involves adopting certain courses of action while discarding others. It is the product of compromises between multiple agendas and influences, over struggles between interests in context. These struggles are generally conducted through discourses where conflicting points of view are heard or unheard by the policy makers.

Through settlements and the other activities involved in policy development, the resulting policy text is commonly significantly modified from the original draft. As Rabb (1994, p. 24) has pointed out, "the pudding eaten is a far cry from the original recipe". With the increasing interdependence of countries, the emergence of transnational issues, and the growth of international organisations, comparing and sharing policy experience to resolve local problems becomes a necessary and an inevitable process. By the time policies reach local educational institutions, they have been transformed many times.

The popular childhood game "telephone" serves as a useful metaphor. In this game, one player whispers a message into a neighbour's ear. The action is repeated until each player has communicated the message, and the last one reveals it to the entire group. The message by the first person often undergoes a significant transformation by the time it reaches the last person, especially if the utterance is complex. A similar process occurs when educational policy constructed by global or transnational networks is transferred to regional, national and local levels (Well 2005).

Nevertheless, comparative education policy research is still littered with examples of the imposition of "one size fits all" development model

and inappropriate application of “world standards”. It remains quite difficult to argue with some foreign consultants in developing projects, especially with foreign donors, that not all instruments that work in some parts of the world also work in the others.

Critical analysis of the global rhetoric is then needed at all levels of the policy-making process. The appropriate methods chosen to conduct such analysis vary, based on the different purposes of doing policy analysis, the policies themselves, the backgrounds of researchers, and the contexts in which the policies operate. The sorts of questions asked in policy analysis depend on its purpose, the position of the analyst and the presence of constraints on the analyst (Taylor et al. 1997). Therefore, making judgements by applying one set of criteria to all policies is inappropriate and perhaps unattainable given the differing ideologies of differing analysts within the complex task of policy analysis. While meeting the above prerequisites does not necessarily guarantee best uses of comparative studies of education policies, failure to achieve even one of them certainly leads to abuses.

Comparing Curricula

Bob ADAMSON & Paul MORRIS

Many stakeholders in education undertake comparisons of curricula. Governments increasingly compare their states' curricula with overseas models when searching for new initiatives and when attempting to enhance international competitiveness; parents compare the offerings of schools in order to choose suitable institutions for their children; students look at the range of courses available when they select electives; and all parties except possibly the pupils make comparisons between current curricula and those which operated in earlier historical periods.

The field of curriculum studies provides many of the theoretical and methodological tools for comparing curricula. Indeed, it could be argued that all curriculum research involves some degree of comparison – one is always (at least implicitly) referring to some “Other” when analysing a phenomenon. For every “What is?”, there exists implicitly the Other “What isn’t?”. Thus, for example, research on teachers' enactment of a particular syllabus incorporates an implicit comparison with a desired outcome. However, explicit comparison heightens the contrasts and reveals similarities by “making the strange familiar, and the familiar strange” (see Spindler & Spindler 1982, p. 43; Bray 2004a, p. 250). The focus of this chapter, therefore, is on research that is based on explicit comparisons of curricula, such as those across cultures and subjects.

These comparisons take diverse forms, partly because the purposes of the stakeholders are different, and partly because the underlying conceptions of what actually constitutes a curriculum vary greatly. While this chapter does not adopt the broadest of these conceptions, it does accept that curriculum is complex and multifaceted, operating at a variety of focal points and in diverse manifestations. This creates a critical problem

of scope for comprehensive analysis and comparison, although it is less of a concern to stakeholders seeking answers to specific, narrowly focused questions (such as students comparing elective courses). The complexity and diversity constrains the capacity of researchers to capture the whole picture, and one usually has to be satisfied with a partial snapshot, even with multilevel analyses. However, the constraints add to the interest and value of the insights that they permit. Comparing curricula is an ongoing investigation of a complex, dynamic entity, and these insights continue to challenge beliefs and understandings that shape and are shaped by curricula.

This chapter begins by examining the conceptions of curriculum in the literature. It then offers a tripartite framework for approaching comparisons of curricula. The framework is applicable for research that involves multilevel or more narrowly focused analyses. The chapter also presents examples of research that have compared curricula, to bring out the complexity of the undertaking and to demonstrate some ways of tackling it.

The Nature of Curriculum

The word *curriculum* originates from the Latin for a short running track, but this metaphor is tantalisingly imprecise. Applying the metaphor by equating curriculum with a “course” of study does not really help to understand the meaning of the word. The term has been applied to the academic disciplines, school and syllabic subjects, teaching, and formal and informal learning experiences and assessments. Seven broad conceptions of curricula have been identified by Marsh and Willis (1995), each of which is a potential focus for comparative study:

- *Classical heritage.* This view of curriculum refers to time-honoured subjects or content – such as grammar, reading, logic, rhetoric, mathematics and the greatest books of the Western world – that are deemed to embody essential knowledge. In this sense, the notion of curriculum is very narrow, culture-bound, conservative and inflexible. It can only be transferred in a limited sense to other cultural traditions. For instance, the content of learning in schools in imperial China was also limited to a few canonical works of classical literature; and the question arises as to who determines

what should be considered as essential knowledge or skills, and how they might be accessed and mastered.

- *Established knowledge.* In this conception, the curriculum is again viewed in terms of subjects and content. The choice of subjects on offer is based around the established academic disciplines which have emerged as the components around which educational institutions are organised. Examples are arts, sciences, humanities and languages, each of which defines what constitutes the key knowledge and skills that pupils should learn.
- *Social utility.* This view of curriculum is also subject-based, but is oriented towards the subjects that are considered most useful for life in contemporary society. Such a view suggests that modernity has a higher value than tradition, and that a curriculum should pass on skills and knowledge which are chosen because they will be useful when the pupils leave school.
- *Planned learning.* A slightly broader view of curriculum embraces the planned learning outcomes, such as critical thinking and tolerance, for which a school is seen to be responsible. These would include aspects such as the subjects on offer, as well as the extra-curricular activities and other types of learning organised by the school. One limitation of this definition (which is equally applicable to the previous three) is the assumption that planned learning equates to actual learning. It omits unplanned learning experiences, and focuses on outcomes rather than processes of learning.
- *Experienced learning.* This conception encompasses all the experiences – both planned and unplanned, and desirable and undesirable – that a learner has within the context of an educational institution. In addition to the planned learning experiences, this conception includes the learner's experiences of the hidden curriculum, which refers to those social values (both negative and positive) that are wittingly or unwittingly reinforced through the construction of planned learning and other institutional modes of communication.
- *Personal transformation.* This view resembles the previous one, but includes the transformation that the teacher undergoes through participating in the learning and teaching processes, as well as the learner's experience.

- *Life experiences.* An even broader conception views all life experiences as constituting the curriculum. This would not distinguish between planned or experienced learning in educational institutions and other real life contexts.

These views of what constitutes a curriculum reflect different emphases. The first two focus on the content of what is taught, and the third and fourth on the goals of education. The last three are concerned with the processes of change experienced by those involved in educational undertakings. One viewpoint, linked to the experiential notion, sees curriculum as text. Pinar and Reynolds (1992, p. 7) emphasise the value of conceiving curricula as phenomenological and deconstructed texts as a means to “present the multivocality, multiperspectivity, and ‘lived’ aspects of text books and classrooms”. For the purposes of this chapter, the last two conceptions (personal transformation and life experiences) are too unwieldy and all-embracing. Instead, the chapter considers curriculum as operating in educational settings, encompassing planned and experienced learning for pupils. This view excludes studies which focus on measuring pupil learning outcomes and on comparing schools as organisations – those areas are discussed elsewhere in this book, particularly Chapters 9 (Postlethwaite and Leung) and 12 (Dimmock).

The various conceptions of the curriculum are shaped by, or derived from social ideologies that are underpinned by normative views and beliefs about the desired role of schooling in society, the nature of knowledge and learning, and the roles of teachers and learners. At least six different ideologies can be identified (Table 11.1), some of which may compete with each other:

- *Academic rationalism.* This ideology stresses the importance of inducting learners into the established academic disciplines (such as physics or mathematics), and equipping them with the concepts and intellectual rigour associated with these disciplines. Academic rationalism is essentially conservative, being concerned with the preservation and transmission of established knowledge through didactic teaching. It tends to emphasise the differences among elements of the curriculum, rather than making cross-curricular connections. Learners are often ascribed a passive role in the teaching–learning process.

Table 11.1: Curriculum Ideologies and Components

Component Ideology	Intentions	Content	Teaching/learning methods	Assessment
Academic rationalism	To enhance learners' intellectual capabilities and cognitive skills, and to teach them how to learn	Focus on the knowledge, skills and values derived from the academic disciplines	Focus on exposition and didactic teaching, and on promoting inquiry skills	Emphasises testing of learners' knowledge and skills, and on academic rigour
Social and economic efficiency	To provide for the current and future human capital needs of a society	Focus on knowledge and skills which are relevant to future employment	Emphasises application and skill mastery	Emphasises assessing learners' ability to apply knowledge and skills
Social Reconstructionism	The curriculum serves as an agent for social reform, changes and criticism	Focus on social needs, issues and ideals	Focus on interaction, group work and learners' involvement in community activities	Focus on the need to involve learners in their own assessment
Orthodoxy	To induct learners into a particular religious or political orthodoxy	Focus on the beliefs and practices of those holding the particular orthodoxy	Focus on didactic teaching, and on promoting requisite beliefs and practices	Focus on learners' adherence to belief system and related practices
Progressivism	To provide learners with opportunities for enhancing their personal and intellectual development	Focus on knowledge as integrated holistic entity and on the process of learning	Emphasises learners' activity and self-learning, and the teacher as facilitator	Focus on the qualitative measures that attempt to analyse the process of learning
Cognitive Pluralism	To provide a wide range of competencies and attitudes	Negotiated content and diversity of input and outcomes	Emphasises learners' activity and self-learning, and the teacher as facilitator	Focus on the qualitative measures that attempt to capture the diversity of learning

- *Social and economic efficiency.* This perspective views the development of human capital as the main role of education. Taking society's needs as the starting point, the curriculum is designed to prepare responsible citizens who have the necessary attributes to contribute to the well-being and growth of the economy. Social and economic efficiency seeks to develop learners' mastery of knowledge and skills that are deemed relevant for future employment, and desirable civic attitudes and values. Teaching and learning is seen as a moulding exercise that allows little scope for learner autonomy.
- *Social reconstructionism.* This ideology envisages education as the means for bringing about social change and improvement. It assumes that society is essentially problematic, and addresses issues such as social injustice, problems and inequities. It seeks to improve society by making learners aware of such issues, and by empowering them to take action to create a better society. The issues provide the focal point of the curriculum, and the learners are actively involved in investigating and finding solutions to the problems.
- *Orthodoxy.* This perspective sees the primary function of schooling as the propagation of a particular orthodoxy. Through the curriculum, the learners are initiated into a fundamental belief system, either religious (such as Christianity or Islam) or political (such as communism, fascism or nationalism). Learners are expected to be relatively passive and uncritical, and successful learning is considered to have taken place when the learners display adherence to the beliefs and practices advocated. By definition, orthodoxy does not recognise the need for change or tolerate diversity.
- *Progressivism.* This ideology is learner-centred, with the curriculum focused on the needs, interests and abilities of the individual. Often associated with constructivist models of learning, progressivism encourages learners to explore and develop autonomously, and to be active constructors of their own learning.
- *Cognitive pluralism.* The curriculum is seen as catering to multiple forms of intelligence, such as those identified by Gardner (1985), and a diversity of competencies and attitudes. Cognitive pluralism can be associated with a reaction against specific vocational training as a society's human capital needs become less predict-

able in times of rapid social change and technical innovation. Learners are viewed as learning in many different ways and becoming skilled to cope with the demands of ever-changing environments.

Clearly, these ideologies can in principle and practice be exclusive. A curriculum could be constructed that is driven by a single ideology, such as fascism. However, in pluralistic societies and institutions, the curriculum is influenced by a combination of ideologies – and these may be contradictory rather than consistent. There is also a tendency for curricula to maintain links to traditions, even though radical changes may be incorporated in curricular reform. As a result, a curriculum is often a complex set of tensions and contradictions that is shaped by ideological, historical and educational forces. The Australian Curriculum Studies Association (ACSA), for example, recognises the complexity of the curriculum and places it within its socio-political contexts. The Association portrays the curriculum as an interactive structuring phenomenon, both explicit and implicit, experienced by all individuals and groups (ACSA 2005). The Association also describes curriculum as a social and historical construction, and observes that it involves notions of social change and the role of education in the reproduction and transformation of society.

The lack of conciseness and the variety of definitions surrounding the curriculum are best interpreted as a manifestation of the perennial dilemmas of schooling and the increasingly complex roles which educational institutions and their curricula are expected to undertake in post-industrial and increasingly pluralistic societies. The main implication is that a comprehensive comparison of curricula would be a major undertaking which would range from analysing what is planned, what is learned that is planned and what is learned that is not planned. Few studies – even those involving multilevel analyses – have attempted such an undertaking.

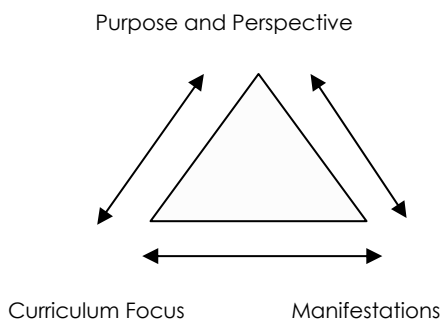
Cross-national comparative studies such as those by Meyer et al. (1992) which focused on school subjects, and the collection by Marsh and Morris (1992) on systems of curriculum development, commonly investigate the first two levels. The study by Alexander (2000) also involved cross-national comparisons, but the focus was on the pedagogy implemented in schools and its connections to national cultures. The cross-national studies of civic education by Cogan et al. (2002) involved the analysis and comparison of each of these levels, while the national studies

presented in Moyles and Hargreaves (1998) compared broader childhood experiences as well as the planned curriculum and implemented pedagogy.

Approaching Comparisons of Curricula

Figure 11.1 presents a framework for shaping comparative curricular inquiry. The three dimensions – purpose and perspective, curriculum focus and manifestations – are interlinked. The framework is based on the premise that the inquirer has a purpose, be it utilitarian (e.g. policy making) or the generation of new understandings. Having a purpose implies the adoption of a perspective. The purpose also informs the question(s) that the inquirer wishes to answer, which in turn would suggest a focal point – an aspect or component of the curriculum – for the inquiry. Data would then be collected from relevant curricular manifestations, which could include documents or behaviours. Each of the three dimensions is discussed in the following sections.

Figure 11.1: A Framework for Comparing Curricula



Purpose and Perspective

As noted earlier, stakeholders carry out a comparison of curricula for a variety of reasons. Short (1991) for example, identifies 17 forms of curriculum inquiry; all have (and would benefit from) comparative applications:

- Analytical
- Ampliative (i.e. challenging implicit assumptions and seeking valid alternatives)

- Speculative (i.e. collecting evidence in order to provide warnings or guidance)
- Historical
- Scientific (i.e. quantitative-oriented)
- Ethnographic
- Narrative (i.e. biographical)
- Aesthetic (i.e. qualitative-oriented)
- Phenomenological (i.e. studying stakeholders' perceptions)
- Hermeneutic (i.e. looking at deeper meanings)
- Theoretical (i.e. seeking valid concepts)
- Normative (i.e. establishing justifications)
- Critical
- Evaluative
- Integrative (i.e. seeking emergent themes, understandings or hypotheses)
- Deliberative (i.e. focusing on resolving a specific issue)
- Action (i.e. seeking to align actions with goals)

These forms of inquiry may be loosely categorised in three perspectives that commonly underpin comparisons of curricula in the literature: evaluative, interpretative and critical. These are discussed below with examples.

Evaluative Perspective

An evaluative perspective would be adopted when seeking evidence in order to make informed decisions about the curriculum (in whatever manifestation). Governments creating league tables of schools based on their performance in order to allocate resources, parents choosing suitable schools for their children, teachers selecting the set book from an array of textbooks and students voting for a Teacher of the Year award are all undertaking evaluative comparisons of aspects of the curriculum.

The studies of pupil performance in mathematics and science conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA) are evaluative insofar as the data are used to influence decisions about aspects of the curriculum (see, e.g. Robitaille & Beaton 2002), even though the main focus was on learning outcomes. Thus the overall poor performance on IEA studies of

pupils in Western societies compared to Asian societies resulted in a range of curriculum reforms in the former designed to rectify the situation.

Interpretative Perspective

The interpretative perspective, which is also known as the hermeneutic perspective, endeavours to analyse and explain phenomena. Examples of comparisons of aspects of the curriculum would include research into the history of a curriculum at different points in time, or into curricular phenomena as sociocultural artefacts. A classic example is Alexander's (2000) study of pedagogy in different cultures, which is discussed in greater detail in Chapter 14 (Law). Alexander compared primary education in France, Russia, India, the USA and England. The key data were semi-systematic classroom observations captured on videotape and audiotape, complemented by interviews, policy documentation, photographs and journal entries. The study compared state provision of education, the physical and logistical organisation of schools, school–community relations, and pedagogy (in terms of lesson structure, organisation and nature of learning activities, routines, interaction and learning discourse). The study had implications for policy makers, and Alexander specifically identified issues relating to his own country, England. However, its primary purpose was to provide a better understanding of pedagogic approaches and how they reflect those societies' cultures.

Another well-known example (which is critiqued by Sweeting in Chapter 6) is the set of studies of primary and secondary school curricula conducted by Meyer et al. (1992) and Kamens et al. (1996). The latter looked at subjects on the school timetable in more than 100 countries, and the amount of time allocated to each in different historical periods. The researchers discerned a shift from elitist classical humanism to more comprehensive curricula, which they attributed to changes in the currents of world history rather than economic, political and educational forces at the national level.

Critical Perspective

A critical approach involves interrogating curricula from a previously determined framework, such as postcolonial, feminist or social equity perspectives. This approach might be appropriate to researchers interested in issues of equity, justice or social reconstruction, for instance. The

purpose of such research is to bring out features of curricula that are present either by design or by accident and that may be perceived as desirable or undesirable. The benefit of adopting a comparative study of curricula when using a critical perspective is the potential to bring out such features in sharp relief.

Within the curriculum, textbooks are one area of particular focus. As Apple and Christian-Smith (1991, pp. 1–2) argue, textbooks reveal

the results of political, economic, and cultural activities, battles, and compromises. [These texts] are conceived, designed, and authored by real people with real interests. They are published within the political and economic constraints of markets, resources and power. And what texts mean and how they are used are fought over by communities with distinctly different commitments and by teachers and students as well.

Sleeter and Grant (1991) analysed the portrayals of race, class, gender and disability in 47 textbooks for social studies, reading and language arts, science, and mathematics in the USA. They devised six categories of analysis – picture analysis, anthology analysis, “people to study” analysis, language analysis, storyline analysis and miscellaneous – and used either tallying or discourse analysis to describe how the textbooks treated different racial groups, different genders, different social classes, and the disabled. The researchers discerned little diversity in the textbooks. Instead, they found a common bias towards whites and males, and against Americans who were people of colour, female, poor and/or disabled. They argued that since textbooks are instruments to social control, textbooks should reflect diversity and give attention to the accomplishments and concerns of all groups.

Curriculum Focus and Manifestations

Since curricula may be amorphous and spread over various aspects of planned and unplanned experiences, for the purposes of obtaining a research focus it is necessary to identify distinct elements or aspects for comparison. These could include:

- (a) The ideologies and societal cultures that influence the curriculum
- (b) Curriculum development and planning systems – the processes and products of curriculum development
- (c) Curriculum implementation – the modes of delivery of teaching and learning experiences

- (d) Experience – planned and unplanned events, values and messages that are experienced by the learner

Each of these elements of curriculum has tangible and intangible manifestations, some of which are identified in Table 11.2.

Table 11.2: Curriculum Manifestations and Typical Research Methods

Aspect of curriculum	Typical manifestations	Typical research methods	Examples
Ideology	Books; academic papers; policy documents	Discourse analysis	Apple & Christian-Smith (1991)
Planned/intended	Policy documents; syllabuses; prospectuses; teaching materials; schemes of work; lesson plans; assessment materials; minutes of meetings; notices	Discourse analysis; interviews	Meyer, Kamens & Benavot (1992)
Enacted	Teacher and student action (e.g. use of time and resources); roles of teachers and students; student interest and involvement; classroom interaction (e.g. questioning patterns; use of group work); school interaction; student output	Lesson observations; teacher's log; interviews; ethnography; activity records	Alexander (2000)
Experienced	Change in student attitude and/or behaviour; change in teacher attitude and/or behaviour; student's cognitive processes	Questionnaires; interviews; autobiographical narratives; reflections; psychometric tests	Included in Cogan et al. (2002) and Moyles & Hargreaves (1998)

An extra dimension to these four aspects is the “null” curriculum (Posner 2004), which refers to what is wittingly or unwittingly omitted from a particular curriculum. Obviously, tangible manifestations are easier for a researcher to access. For instance, policy documents can be obtained from various sources, such as government offices, educational institutions, the authors and the internet. Likewise, it is usually reasonably straightforward to obtain the teaching materials that are used in a particular context. Teaching and learning experiences are less readily obtainable for analysis – not just logistically, in the sense of gaining access to classrooms or other education sites, but also analytically. This is because such experiences are less tangible than printed materials, and are available to the researcher in highly subjective and indirect manifestations such as behavioural responses or post-lesson reflections on the experiences.

Research Methods in Comparing Curricula

As in most fields of research, a range of qualitative and quantitative methods can be used in comparisons of curricula. The research methods to be adopted in any study obviously depend on the research perspective (evaluative, interpretative or critical); the curriculum focus; and the curricular manifestations that are available. Many studies use mixed methods to capture the richness of curricula-in-context. For example, Alexander’s (2000) study described above blended a more holistic, ethnographic approach with an atomistic focus on discrete aspects of pedagogy in order to establish a multidimensional portrayal of classroom events. Other studies may be mainly concerned with specific details, such as a critical inquiry comparing the number of teacher questions directed to boys with those directed to girls. In this case, a quantitative observation instrument might be the main data collection instrument, although some ethnographic or phenomenological data might be collected if, for example, an interpretative perspective is also being adopted.

Based on the three general perspectives (evaluative, interpretative and critical) identified above, the following examples of comparative curriculum research used a variety of methods. They have been included in this chapter to illustrate processes in action and to highlight some of the issues that the researchers need to address.

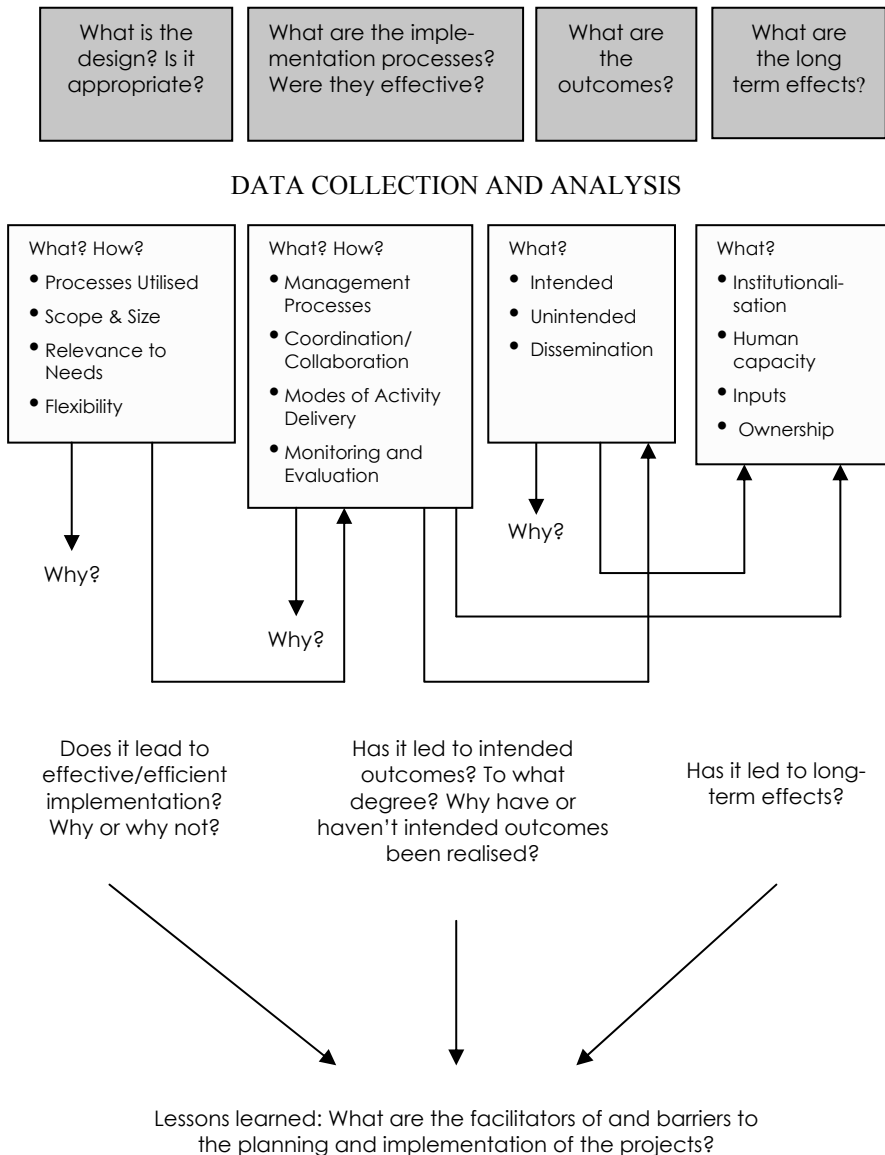
Evaluative Study

An example of this kind of study was an evaluation of the educational projects that had been undertaken by an international aid agency in China over a five-year period (UNICEF 2000). The purpose of the evaluation was to identify the strengths and weaknesses of the projects. An evaluation team was constituted for one month of discussions, field trips and report writing. The problem facing the team was the scale: several hundred projects had been instituted across China in the five years, in four different groups, such as adult education and primary education. The projects had been approved at the national level, managed at the provincial level, and developed and implemented at the local level. Thus the evaluation would cover the planning, enactment and experience of these educational projects (or curricula).

The team's solution was to devise a T-shaped approach that encompassed the key focal points of the planned, implemented and experienced curriculum. As the planning of projects had been concentrated in one or two offices at the national and provincial levels, it was reasonably straightforward to identify key decision makers across the four different groups of projects, and to collect appropriate data with semi-structured interviews and documentary analysis. However, for the evaluation of the implemented and experienced curricula it was necessary to use tracer studies. A representative handful of projects were selected from the hundreds in the four groups, and were followed from the planning stage to implementation and experience. The data from the interviews and observations made on field trips to the project sites were collated and compared with a view to identifying the factors that facilitated and hindered successful outcomes.

To guide the study, coherence in the research questions was devised by adapting the four critical dimensions of policy making identified by Elmore and Sykes (1992), namely the nature of policy, the sources or origins of the policy, the forms of action and the impact (Figure 11.2).

Figure 11.2: Curriculum Evaluation: An International Aid Agency's Projects



The first two dimensions were merged: the team was trying to find out whether the projects matched the overall objectives of the aid agency, and if so, whether they were designed in a feasible manner given the constraints

of time and resources. The *forms of action* dimension were interpreted as incorporating both the project components (e.g. the development of a new cultural curriculum in an ethnic minority area) and the management of the projects. The impact dimension was also divided into two: the outcomes that were apparent in the short time that the curricula had been implemented, and the likely prospects for sustainability – an important factor for the international aid agency.

The outcome of the research was a report that evaluated the implementation of the curricula. The report made recommendations for the next five-year cycle of projects that would build upon the good practices and address the problems that had been uncovered. The comparative perspective made clear which practices were effective and which problems were evident in more than one setting, which gave greater validity to the report's recommendations.

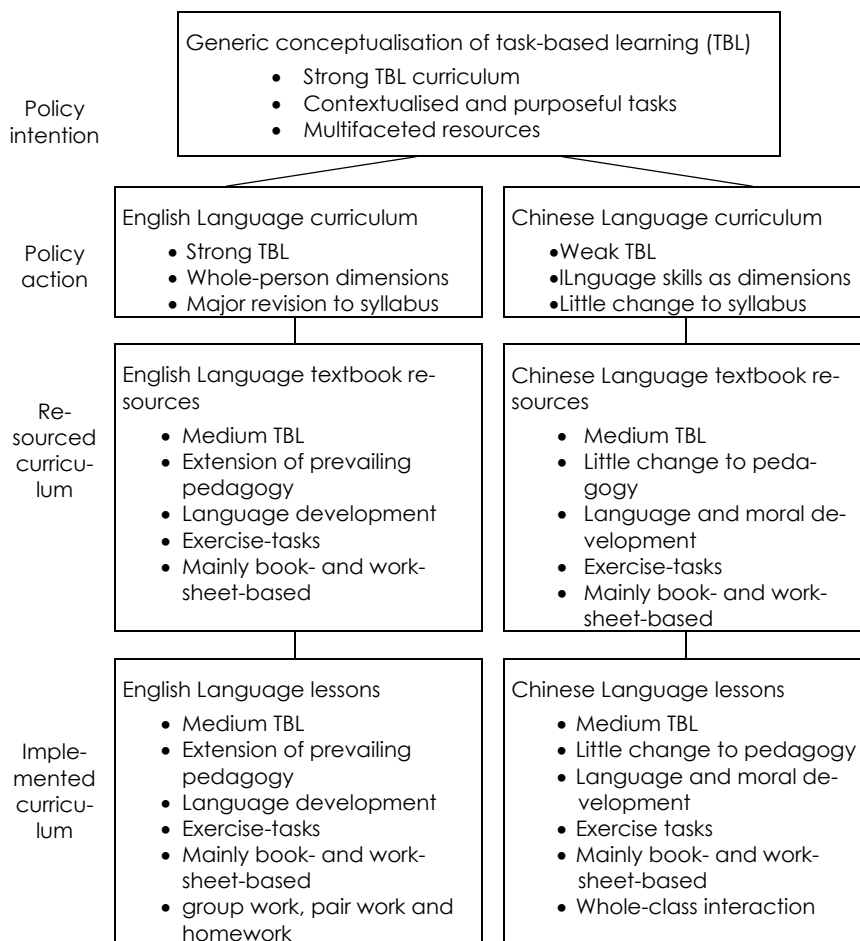
Interpretative Study

An example of an interpretative study is a research project (Tong et al. 2000) that examined how task-based learning was planned, implemented and experienced in two different subjects in the Hong Kong school curriculum – Chinese Language and English Language – and sought reasons for these realisations. The study compared task-based learning in the two subjects in three different manifestations, thus setting up a horizontal comparison across the subjects and a vertical comparison within each subject. The three manifestations were the policy documents, commercially published textbook resources, and lessons in classrooms.

The description of tasks in the policy documents was analysed using a conceptual framework that was based on a continuum (focus on individual grammar at one end, and focus on realistic language in use at the other end) derived from a study of definitions in the literature on task-based learning in language teaching. The same framework was used for the analysis of the tasks published in various sets of textbooks and other resources in the two subjects. The manifestations of task-based learning in the classroom were studied by classroom observations that provided notes taken regularly during the lessons on the nature and purpose of each learning activity, the roles of the learners and the teachers, and the kinds of interaction that took place among them. This data collection was supplemented by semi-structured interviews with publishers, textbook writers and teachers that included questions on the nature of task-based learning as conceived by the informants, on how they went about producing

the textbook resources or lessons, on the principles that they used to guide the process, and on the experiences gained by the informants in the process.

Figure 11.3: Interpretations of Task-Based Learning from Policy Intention to Implementation



Source: Tong et al. (2000, p. 167).

The study found that tasks were interpreted differently both across the two subjects and also in the different manifestations within the subjects (Figure 11.3). The two subjects, Chinese Language and English Language, had emerged from very disparate pedagogical traditions in

Hong Kong. This partly reflected the natures of the languages (for instance, Chinese using characters and English using phonological script) and partly reflected the functions of the two languages in Hong Kong society (Chinese as mother tongue for the vast majority of the population, and English as a language of officialdom and international trade). The two traditions led to differing interpretations of task-based learning in the policy documents and at the chalkface. Meanwhile, textbook writers and publishers were faced with commercial realities, which constrained the extent to which they complied with policy documents. They preferred to address the needs and requests of teachers, who were the main stakeholders in each school's choice of textbook resources. These historical, sociocultural and pedagogical forces brought about a variety of interpretations of the "official" definitions of task-based learning.

The interpretative outcomes of the study also had an evaluative edge. They demonstrated the problems facing curriculum planners of achieving coherence as a reform progresses from intention to implementation, and highlighted the need to take into account the historical, socio-economic and pedagogical contexts in which curricula operate. Designing an "ideal" curriculum on the basis of uncontextualised theory only creates a "fantasy" curriculum that results in disappointment when the anticipated outcomes are not realised.

Critical Study

An example of a critical study is Hickling-Hudson and Ahlquist's (2003) analysis of the discourses of ethnicity in school curricula provided to indigenous children in four primary schools, two in Australia and two in the USA. The critical dimension of the research was to draw attention to the questions of who defines the curriculum and whose interest is served (Hickling-Hudson & Ahlquist 2003, p. 65) and then to remedy the situation:

The overarching concerns [of the researchers] are with how schooling may help children of color to develop identities that are not distorted by the colonizing identity of Eurocentrism, and how teachers can learn to challenge assimilationist curricula and teach instead about the diverse histories, sciences, and arts of people of color in the world.

The researchers identified a school in each country in which the curriculum exhibited what they felt were poor practices, and a school in each

country that displayed good practices. This arrangement therefore set up international and intranational comparisons. On field visits to the schools, classes were observed, staff and students were interviewed, and notes were made concerning the library facilities, wall displays and other curricular artefacts. In the schools identified as exhibiting poor practice, the researchers found that the curriculum was grounded in white culture: Aboriginal children in the Australian school were observed decorating Christmas trees, or being encouraged to read European fairy tales, while the walls were decorated with Disney characters; in the US school, the corridors were lined with pictures depicting white histories, and literacy lessons were focused on the demands of state tests. The researchers felt that such schools were “perpetuating a European industrial factory model of schooling that regiments learners and disregards their interests and backgrounds” (Hickling-Hudson & Ahlquist 2003, p. 80). In contrast, the researchers visited a school in each country that challenged the Eurocentric view, with posters and library resources that celebrated indigenous culture, and lessons that were grounded in the students’ life experiences. Unlike the other two, these schools enjoyed strong community support and involvement.

Conclusions

To guide the researcher embarking upon comparative curricular inquiry, this chapter has identified some of the pitfalls and possible directions. It has proposed three interlinked considerations for approaching the task: determining the purpose and perspective of the study, selecting apposite points of curricular focus, and identifying the relevant curricular manifestations.

Curriculum is a complex, multifaceted and dynamic concept, and covers such a broad range of stakeholders, perspectives, processes and manifestations that it is barely feasible to encompass all aspects comprehensively in a single project. Some comparisons, often carried out for utilitarian purposes, do not aspire to be comprehensive, being only concerned with answering narrowly focused questions. However, when broader questions are investigated, it is important that the limitations of scope are acknowledged and that appropriate caveats are issued to guard against overgeneralisation of the findings. For instance, the results of an interpretative comparative study of curriculum-planning processes are not necessarily applicable to the implementation of those curricula in

classrooms. Different influences and tensions come into play, as demonstrated by the example concerning task-based learning in Chinese Language and English Language in Hong Kong. Another major problem arises from the variety of contexts of time and place. It is very difficult to make generalisations about the curriculum without taking full account of those contexts. Broad international comparisons of trends in school curricula, for instance, are only truly meaningful if the interpretation of subjects is similar in each context. A subject might be labelled "History" in two different countries, but the nature and content of the subject might vary so much as to render comparison futile.

The dynamic nature of curriculum arising from the human interactions that occur at its many focal points of planning, implementation and experience, together with the regularity with which curriculum reform is undertaken, means that comparisons of the curriculum will always be a work-in-progress. This does not mean that comparisons of curricula are without value. When used with circumspection they permit useful transfers of good practice, allow informed decision making, and deepen understandings of the interactions between education and its social, economic and political contexts.

Comparing Educational Organisations

Clive DIMMOCK

This chapter explores the challenges of, and prospects for, research comparing educational organisations and institutions in and across societies. For over a century, researchers and writers have been eliciting features of different education systems. Their focus has been diverse, ranging from educational policy and system-wide structures at the macro level to particularities of curriculum, pedagogy, leadership, management and governance at the micro level.

Some of this work has been genuinely comparative, i.e. concerned with mapping similarities and differences between aspects of education in different places and countries. Perhaps the majority of studies, however, have taken the form of information about a system other than one's own, with only the hint (sometimes not even that) of a comparison of similarities and differences with other systems. On another scale, some of this work has been carried out under the auspices of large international agencies, such as the Organisation for Economic Co-operation and Development (OECD), while at the other end of the scale has been the work of individual academics and students.

Aims and Purposes of Comparing Educational Organisations

Why is there value in comparisons between organisations in different societies? In current times of instrumentalism, there is widespread interest in organisational performance in other societies. There is a preoccupation with educational performance, achievement and outcomes within a global competitive marketplace, and a desire to know which countries are achieving faster economic growth and better learning outcomes.

Close links between educational and economic performance are assumed, since a skilled and educated workforce is considered an essential condition for a high-tech economy to achieve economic growth. What is it about those countries' educational organisations that make them relatively successful? Can the key characteristics of their success be identified and compared to organisational performance elsewhere? Can something be learned from these organisations that may be transferable? In other words, by coming to know other societies' organisations, can we improve understanding of own?

Besides the instrumental purpose of comparing organisational performance in different settings, and accounting for it, some people are willing and ready to justify comparative studies on the basis of pure intrinsic interest. There is something refreshingly attractive and compelling about such motives. They remind us of past traditions of scholarship, and knowledge for its own sake. An extension of this motive is the academic pursuit of developing theory. While the instrumentalism of trying to understand and account for performance may rest more on practical grounds, there might be an alternative priority of improving the theoretical foundations of a phenomenon. For many, the motives may be interlinked: knowledge of good practice reinforces theory, which in turn reinforces practice and creates a double-loop process.

Alternative Perspectives for Comparative Purposes

This chapter outlines a cultural and cross-cultural approach to the comparison of educational organisations. However, a number of alternatives to a cultural perspective exist. Probably the most common is the structural-functionalist approach. Typically, this focuses on comparing either whole education systems or particular parts across different societies. Examples of the macro approach include school system comparisons such as between Taiwan and Japan, or England and France. An extreme version of the macro comparative approach is world systems theory. At the micro end of the scale, comparative studies look at the roles and functions of individual types of schools, or ministries of education, or advisory and inspection units.

Both macro- or micro-level comparisons face problems. For example, macro studies on whole education systems tend to suffer from overgeneralisation, and therefore neglect local differences and disparities (Bray & Thomas 1995). On the other hand, micro-level studies may focus too

narrowly and neglect external contexts and interrelationships between different levels of systems. For such reasons, theoretical tools that stretch beyond structural-functionalist perspectives should be considered. Although structural-functionalist models are useful for fracturing education systems into their constituent elements (structures), their explanatory potential is limited in explaining how and why various processes interact. As a result, their analytic power is diminished through adopting static rather than dynamic views of educational organisations. Consequently, explanation remains at the surface, and rigorous comparison remains rare.

The need is for a perspective that takes account of the multiple levels of environment within which educational organisations function, that allows for a dynamic interdependent relationship between the levels, and that facilitates study of deeper, and less formal and more subtle features of organisations than simply the formal and surface structures. This leads to a preference for a cultural perspective that facilitates multilevel and interdependent analysis of educational organisations, as explained in the following sections.

A Cultural and Cross-Cultural Comparative Approach

The case for a cultural approach rests on at least three grounds (Dimmock & Walker 1998a, 2000). The first has been discussed above – the problems associated with existing approaches, such as the structural-functionalist.

The second is the suitability of culture as a concept with explanatory power to meet the criteria mentioned above – namely, multilevel, flexible, dynamic, allowing deep as well as surface analysis, and informal as well as formal parts of organisations. “Culture” is defined as the enduring sets of beliefs, values and ideologies underpinning structures, processes and practices that distinguish one group of people from another. The group of people may be at school level (organisational culture) or at national level (societal culture). Since culture exists at multiple levels, it gives researchers rich opportunities for exploring many interrelationships, such as those between schools and their micro and macro environments. It also helps to identify characteristics across organisations that have surface similarity but are quite different in mode of operation. Schools across different societies, for example, seem to have similar, formal leadership hierarchies, but these often disguise subtle differences in values, relationships and processes.

The third justification rests on the insidious dangers of globalisation and internationalisation in promoting cultural borrowing and transfer of policies and practices across cultural boundaries (Dimmock 1998). The dominance of Anglo-American theory, policy and practice, and the adoption of policies and practices conceived in these societies, tends to deny or understate the influence that culture, and societal culture in particular, may have on the successful implementation of policy. There is serious risk that understandings will remain too narrowly conceived. Successful implementation of policy and practice adopted from elsewhere is predicated on “cultural fit”.

An overview of a proposed cross-cultural comparative model developed by the present author (see Dimmock & Walker, 1998b) shows it to have two interrelated parts:

- Four elements constituting schooling and school-based management
- A number of cultural dimensions at each of the societal and organisational levels which facilitate comparison

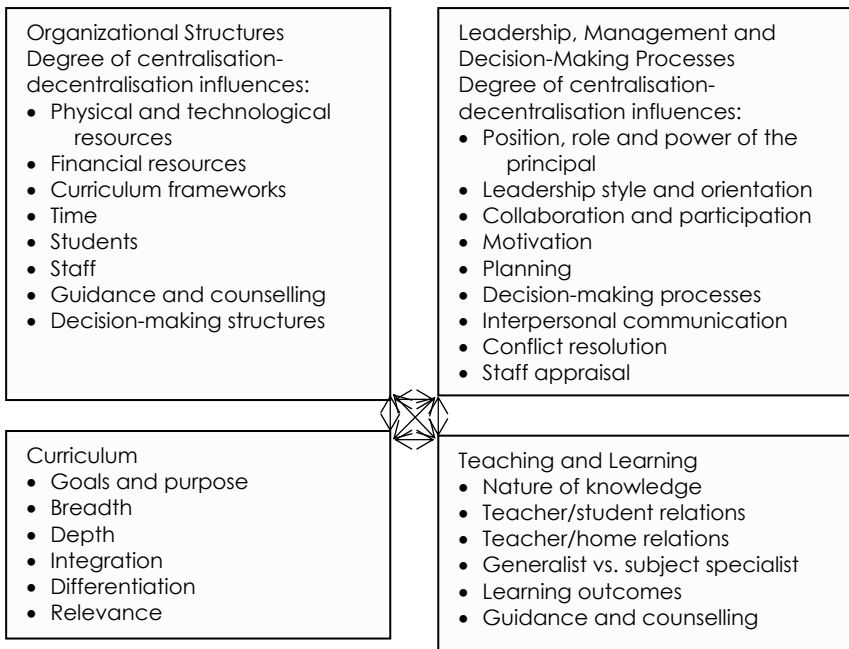
The following sections elaborate on each of these.

Elements of Educational Organisations

In order to engage in comparative analysis of educational organisations, it is important to clarify the elements that constitute schools and colleges (see Figure 12.1). Comparative researchers may focus on the entirety, or on one or a combination of elements.

The school or college is taken as the unit of analysis for comparison in the suggested framework, and is assumed to comprise four elements: organisational structures; the curriculum, which is a substructure; leadership management and decision-making processes; and teaching and learning, which is a subset of school processes. These four elements provide a convenient way to encapsulate the main structures and processes that constitute the educational organisation. Two of the four comprise the managerial and organisational aspects of school life, while the remaining two elements form the core technology of the school or college concerned with curriculum, teaching and learning (Dimmock & Walker 1998b, 2000). Relationships with other parts of the system, such as the district and central office, and with local community and social service agencies, may also be considered. Below is an overview of all four.

Figure 12.1: Four Elements of Educational Organisations



Organisational Structures

Organisational structures are the more or less enduring configurations by which human, physical and financial resources are established and deployed. Structures represent the fabric or framework of the organisation, and are thus closely associated with resources and their embodiment in organisational forms. They also provide policy contexts within which schools have greater or lesser discretion. Thus, schools and colleges in strongly centralised systems experience more explicit and rigid policy “structures” imposed from system levels, with possibly less need for organisational decisional structures. In contrast, decentralised systems may have more school or college decision-making structures but fewer policy structures imposed from outside. There are two main types of structures: administrative and curricular.

- *Administrative structures* include a wide range of phenomena, from buildings (size and layout) to financial resources, time (including the

school year), human resources (for example, intake criteria), student groupings, student counselling, and decision-making structures.

- *The curriculum* is an organisational substructure, since it is the form in which knowledge, skills and attitudes are configured for delivery to students. System-level curricular frameworks provide a structure within which schools operate. Structural dimensions are expressed in terms of goals and purposes, subject breadth, subject depth, subject integration, differentiation in catering to ability levels, and relevance (especially economically and socially).

Organisational Processes

Processes form the second element of educational organisations. They are of two main types: administrative/managerial and teaching/learning.

- *Administrative/managerial processes* lie at the core of administration. They include the leadership of the principal and others in the organisation, i.e. the degree of distributed and shared leadership, ways of motivating staff and the extent to which they are motivated, the planning of activity, how decisions are made, and ways in which staff communicate, resolve conflict and are appraised and developed.
- *Teaching and learning processes*, as part of the core technology of schools, warrant separate identification even though they are related to managerial processes. Differences in the ways in which educational organisations conduct teaching and learning activities can be compared according to teaching methods and approaches (for example, teacher-centred or learner-centred methods). They can also be compared according to role expectations of teachers – the multiplicity or specificity of the teachers' duties, the degree of specialisation/breadth of subject content taught, and the degree to which teachers combine a counselling function with their subject teaching.

Comparisons may be made of the role of the learner in terms of passivity/proactivity in learning, and in degree to which specific outcomes and goals dictate learning. In a broader context, comparisons can be made on the basis of teacher–parent relationships as it relates to teaching and learning, and the role of parents generally.

Six Dimensions of Societal Culture

Culture is a difficult phenomenon to measure, gauge or even describe. The identification of cultural dimensions, defined as core axes or continua around which significant sets of values, beliefs and practices cluster, not only facilitates their description and possible measurement but also promotes comparison between cultures. Dimensions provide common yardsticks against which cultural characteristics at the societal level can be described, gauged and compared (Dimmock & Walker 1998b). Despite their usefulness, however, Hofstede (1994, p. 40) rightly pointed out:

They are also constructs that should not be reified. They do not “exist”; they are tools for analysis which may or may not clarify a situation.

Previous research by Dimmock and Walker (1998a, b) involving the review of existing frameworks led to a model of societal and organisational culture (Table 12.1), which is adapted from the work of Hofstede.

Power-Concentrated/Power-Dispersed

This first dimension is modelled on Hofstede's (1991) power-distance construct. Power is either distributed more equally among the various levels of a culture or is concentrated among relatively few. In societies where power is widely distributed, for example through decentralisation and institutionalised democracy, inequity is treated as undesirable and every effort is made to reduce it where possible. In societies where power is commonly concentrated in the hands of the few, inequities are often accepted and legitimised.

Table 12.1: Dimensions of National/Societal and Organisational Culture

National/Societal cultures	Organisational culture
Power-concentrated/power-dispersed	Process-oriented/outcome-oriented
Group-oriented/self-oriented	Person-oriented/task-oriented
Aggression/consideration	Professional/parochial
Fatalistic/proactive	Open/closed
Generative/replicative	Control and linkage
Limited relationship/holistic relationship	Formal/informal
Relative influence of males and females in organisational life	Tight/loose
	Direct/indirect
	Pragmatic/normative

Group-Oriented/Self-Oriented

The second dimension describes whether people within a given culture tend to focus on self or on their place within a group. In self-oriented cultures, people are judged and status ascribed according to individual performance and accomplishments. In group-oriented cultures, ties between people are tight, relationships are firmly structured and individual needs are subservient to collective needs. Important collectivist values include harmony, face-saving, filial piety and equality of reward distribution among peers. Status is traditionally defined by factors such as age, sex, kinship, educational standing or formal organisational position.

Aggression/Consideration

In aggression cultures, achievement is stressed, competition dominates and conflicts are resolved through power and assertiveness. Systems and organisations tend to be competitive, and in an organisational context assertiveness is taken as a virtue; selling oneself, decisiveness and emphasis on career are all valued. By contrast, in consideration societies, emphasis is on relationship, solidarity and resolution of conflicts by compromise and negotiation. Organisational values tend to be caring.

Fatalistic/Proactive

This dimension addresses how different societies and cultures react to and manage uncertainty and change in social situations. In proactive societies, people tend to believe that they have at least some control over situations and over change. They are tolerant of different opinions, and are not excessively threatened by unpredictability. In fatalistic cultures, on the other hand, people believe “what is meant to be, will be”. Uncertainty is often viewed as psychologically uncomfortable and disruptive, and people seek to reduce uncertainty and limit risks by hanging on to tradition. This often involves the inflexible retention of rules and dogmas that breed orthodoxy.

Generative/Replicative

This dimension reflects the fact that some cultures appear more predisposed toward innovation or the generation of new ideas and methods (generative), whereas other cultures appear more inclined to replicate or to adopt ideas and approaches from elsewhere (replicative). In generative cultures, people tend to value the generation of knowledge, ideas and new ways of working, and they seek to create solutions to problems, to

develop policies and ways of operating which are original. In replicative cultures, people are more likely to adopt innovations, ideas and inventions developed elsewhere.

Limited Relationship/Holistic Relationship

In some cultures, interpersonal relationships are limited by fixed rules applied to given situations, whereas relationships in other cultures are more holistic or underpinned by association and personal considerations. In limited relationship cultures, interactions and relationships tend to be determined by rules that are applied equally to everyone. For example, in deciding a promotion, objective criteria are applied regardless of who are the possible candidates. In holistic cultures on the other hand, greater attention is given to relationship obligations (for example, kinship, patronage and friendship) than to impartially applied rules (Dimmock 2000). Dealings in formal and structured situations in holistic cultures are driven more by complex, personal considerations than by the specific situation or by formal rules and regulations.

Six Dimensions of Organisational Culture

Societal cultures differ mostly at the level of basic values, while organisational cultures differ mostly at the level of more superficial practices, as reflected in the recognition of particular symbols, heroes and rituals (Hofstede 1991). This allows organisational cultures to be managed and changed, whereas societal cultures are more enduring and change only gradually over long time periods, if at all.

Research on the organisational cultures of companies has found large differences in their practices (symbols, heroes rituals), but only minor differences in their values (Hofstede 1995). Most of the variation in practices could be accounted for by six dimensions, although further validation of these is required. These six have been adapted to investigate organisational culture in education (Dimmock & Wildy 1995). In addition, while Hofstede presents the dimensions as either/or choices along six axes, it is possible that some of them might be multidimensional rather than unidimensional. The six dimensions are as follows:

Process-Oriented and/or Outcomes-Oriented

Some organisational cultures are predisposed towards technical and bureaucratic processes, while others emphasise outcomes. In outcome oriented cultures people perceive greater homogeneity in practices,

whereas in process-oriented cultures people perceive greater differences in their practices. In education, some schools are process-orientated, emphasising the processes and skills of decision making, teaching and learning; while others are results oriented, stressing learning achievements such as examination results. Many schools and school systems are reforming their curricula to reflect specific student learning targets or outcomes expressed in terms of knowledge, skills and attitudes, indicating a trend towards designing curricula on the basis of, and measuring student and school performance by, a learning-outcomes approach. Strong cultures tend to be more homogeneous and therefore results- or outcomes-oriented.

Person-Oriented and/or Task-Oriented

In task-oriented organisational cultures, emphasis is placed on job performance and maximising productivity, while human considerations such as staff welfare take second place and may even be neglected. Conversely, person-oriented cultures accentuate the care, consideration and welfare of employees. Blake and Mouton (1964) recognised these leadership orientations in the 1960s. Applied to schools, a task-oriented culture exacts maximum work effort and performance out of its teachers in a relatively uncaring work environment. A person-oriented culture on the other hand values, promotes and shows consideration for the welfare of its teachers. It is conceivable that some schools might score highly (or lowly) on both task and person orientations.

Professional and/or Parochial

In professional cultures, qualified personnel identify primarily with their professions, the standards of which are usually defined at national or international level. In parochial cultures, members identify most readily with the organisations for which they work. Sociologists such as Gouldner (1957) have long recognised this phenomenon in their distinction between locals and cosmopolitans. In the school context, some teachers, especially those with an external frame of reference, are primarily committed to the teaching profession as a whole, while others with a strong internal frame of reference are more committed to the particular school in which they work. Professional and parochial values and practices may sometimes clash.

Open and/or Closed

This dimension refers to the ease with which resources, such as people, money and ideas, are exchanged between the organisation and its environment. The greater the transfer and exchange of resources between the environment and the organisation, the more open the culture. Schools vary between those that champion outside involvement in their affairs and maximum interchange with their environment, and those that eschew such interaction and communication, preferring a more closed, exclusive approach. Trends in education have favoured the opening of school cultures, particularly to parental influence and involvement.

Control and Linkage

An important part of organisational culture concerns the way in which authority and control are exerted and communicated between members. Three sub-dimensions are recognised here:

- *Formal/Informal.* Organisations vary in the extent to which their practices are guided by rules, regulations and formal procedures on the one hand, and the extent to which they reflect a more relaxed, spontaneous and intuitive approach on the other. Highly formalised organisations conform to the classic bureaucracies. They emphasise definition of rules and roles, tend towards inflexibility, and are often characterised by austere interpersonal relationships. By contrast, informal organisations have fewer rules dictating procedures. Roles are often blurred, they display flexibility in their modes of work, and interpersonal relationships tend to be more relaxed.
- *Tight/Loose.* This is the degree to which members feel that there is strong commitment to the shared beliefs, values and practices of an organisation. Such strong commitment might come through hierarchical supervision and control, or through members' own self-motivation. An organisation that has strong homogeneity and commitment in respect of its members' values and practices is tight (whether control is externally imposed or self-imposed). Conversely, a loosely controlled culture is one with only weak commitment to, or acceptance of, shared beliefs, values and practices.
- *Direct/Indirect.* This aspect captures the linkages and patterns of communication through which power, authority and decisions

are communicated. In some organisations, managers assume direct personal responsibility to perform certain tasks and to communicate directly with their staff, often leapfrogging intermediate levels in the vertical hierarchy or chain of command. In other organisations, managers exert control indirectly by delegating to staff the tasks they would otherwise have done themselves.

Pragmatic and/or Normative

This dimension defines the core values by which an organisation serves its clients, customers or patrons. Some display a flexible, pragmatic policy aimed at meeting the diversity of customer needs – captured in education by saying that the organisation adapts to the students' needs. Others exhibit more rigid or normative approaches in responding bureaucratically, failing to meet individual needs – summarised in education by saying the student is moulded to fit the organisation. Some schools consciously try to meet individual student needs by offering more diversified curricula with flexible timetables and alternative teaching strategies. They mould their educational services to meet student needs. Others, particularly the more traditional schools, may be less student focused, expecting the students to fit rigid school values.

Applying the Framework

Having identified the key elements of educational organisations, and both sets of societal and organisational cultural dimensions, brief explanation is needed of how the framework is made operational. This is achieved by applying the cultural dimensions to the elements of educational organisations. A few examples will suffice.

In comparative study aimed at the relationship between educational organisations and their respective societies, one might choose to take some or all of the seven dimensions of societal culture and apply them to the organisations in their respective countries. Thus, comparison of the management of a higher education institute in say France with that of a similar institute in the UK, or a university in Hong Kong with one in Taiwan, could be framed in terms of the distribution of power in those respective societies in general; the degree of collectivism-individualism; the degree of aggression-consideration; the extent to which people feel in charge of their futures; the degree to which each society culturally borrows ideas from others; the importance of relationships as a basis of making decisions; and the degree to which males and females control and influence public life and its organisations.

Another study might look at two or more educational organisations in countries X and Y using the dimensions of organisational culture as the conceptual frame. All or some of the six dimensions of organisational culture could provide an analytical framework. For instance, the organisations might be compared for the openness or otherwise of their relationship with their environments; or for the patterns of authority and control, or for their adaptability in meeting the diverse needs of their communities.

In a more narrowly conceived study at the micro level, a researcher might be interested in comparing leadership styles and roles in two or more schools in different *societal* cultures, in which case data would need to be gathered through applying the power concentrated/power distributed cultural dimension to leadership. Other dimensions, such as consideration/aggression, might also be relevant. If the same interest in leadership style and role were examined at the *organisational* culture level, data would need to be generated by applying relevant organisational culture dimensions to leadership; in this case, person-task and control and linkage (see Table 12.1).

Research Methods and Issues: A Cross-Cultural Approach

The discussion in this chapter has so far provided a justification and description of an approach to the comparative study of educational organisations based on culture and its key dimensions at two distinct levels: societal and organisational. A framework embracing elements and dimensions of these phenomena has been outlined. There remains the challenge of designing methods of data collection and analysis based on the framework.

In facilitating the data collection process, a number of instruments – both quantitative (survey questionnaires) and/or qualitative (interviews, case studies, vignettes, observations documentary analysis) – are needed to apply the cultural dimensions to the various elements of educational organisations. The research purpose and the research question determine which elements and cultural dimensions are relevant. It may not be necessary to apply all of the dimensions to all of the elements – that would be quite demanding.

As an example, assume a researcher is interested in comparing the concepts of “distributed leadership” or “teacher leadership” in educational organisations in different countries. Suppose it was decided to design a

questionnaire to administer to principals and teachers in the educational organisations to be sampled. Relevant organisational elements and dimensions of societal and organisational culture would need to be identified from the framework – such as administrative and managerial processes of leadership, collaboration, participation and motivation and in particular the societal culture dimension of power concentrated/dispersed and the organisational dimension of control and linkage. Each element would need to be “unpacked” and expressed in the form of questions or items for the questionnaire. Likert-type scales and questions might be used to represent the range of cultural characteristics on each of the cultural dimensions (for example, power-concentrated to power-dispersed), and these questions would need to be applied to each of the relevant organisational elements in turn. Assuming that this procedure was carried out systematically in educational organisations in different societies, it would yield comparative data using a set of generic concepts.

Similar procedures are followed if qualitative data collection methods are preferred. Interview schedules, case studies and vignettes can be constructed that capture the relevant organisational elements, and then responses are sought from participants to specific questions asked about the cases or vignettes presented. The same, or similar, vignettes and interview questions need to be asked across all of the organisations and societies being compared, so that the researcher can draw comparative conclusions based on the application of generic cultural concepts.

An example of such a vignette used in a project in which the present author was involved well illustrates the points above. A vignette was written whereby the principal of the school had to deal with a conflict between an expatriate teacher and the vice-principal of the school. Essentially, the conflict had arisen because the expatriate teacher – in this case a Westerner in a non-Western setting – insisted on being independently minded and teaching in his own style, thereby ignoring the school’s teaching policy, the enforcement of which was the vice-principal’s responsibility. Respondents in this qualitative research project were to assume that they were the principal of the school, and to indicate with reasons how they would respond to this situation. The situation was made a little more complex by inserting some additional factors. For example, the expatriate teacher was a good practitioner and many recognised his innovative teaching. The vice-principal, likewise, was well respected by staff and the principal.

When this vignette is given to respondents in different cultures, we find that it discriminates very well along cultural lines. For example, respondents in high power-distance and collectivist cultures tend to respond in ways that support the vice-principal, boosting his authority, maintaining control from the top and the collective harmony of the group, and backing hierarchically the more senior staff member. In societies with low power-distance and more individualistic cultures, the respondents often champion the teacher, arguing that there should be more respect for the teaching flair and individualism of teachers, and seeing it as the responsibility of the vice-principal to encourage, not deter, such individual creativity. Vignettes carefully constructed in this way can be very effective instruments for drawing out societal and cultural differences in organisation, leadership and management.

Cross-cultural research methods in this domain do, however, have limitations. Approaches and tools are still in their infancy; and this creates challenges because there is little in the way of existing research tools and instruments on which to build – especially in education. However, the void creates opportunities for committed researchers, who may be able to find parallel work in cross-cultural psychology and international business management. This is a useful basis on which to develop instruments and methods for possible transfer to education and comparative education in particular. In both of these cognate fields, mainly quantitative instruments have been developed.

The most challenging aspects of developing methodology of a cross-cultural kind are grounded firstly in the contestability of the concept of culture itself, and secondly in developing data collection methods and instruments that adequately capture cultural similarities and differences between people and organisations in different societies (Walker & Dimmock 2002).

Regarding the contestability of the concept itself, debate continues between traditionalists and modernists over whether a society's culture should be restricted to more traditional, enduring values, or whether it should embrace more contemporary changes. A second issue is not to overstate the claims for culture. Not all differences between societies and their organisations arise because of culture. Other influences, such as history, politics, economics and religion also contribute; but having said this, the boundaries between culture and these other influences, are blurred. Hofstede (1996) argued that ultimately most things are embraced by, or contribute to, culture – including history, politics, economy and religion.

A further need is to avoid stereotypes. Labels such as “Western” and “Asian” are confusing and mask significant internal differences. For example, differences between French and English (both Western European) or Chinese and Japanese (both Asian) may be as significant as between English and Chinese. Equally, the rate of change in the ethnic mix of many societies because of immigration is producing more eclectic and heterogeneous populations. This is making it harder to distinguish clearly demarcated homogeneous cultures. Many cultures are becoming more hybrid, especially with second- and third-generation intercultural marriages.

Future Prospects, Directions and Benefits of a Cross-Cultural Approach

This chapter has argued the case for a cultural and cross-cultural approach to the comparative study of educational organisations. It has outlined a possible conceptual and methodological framework predicated on culture. In so doing it acknowledges that there are other approaches, and that a cultural perspective itself is not without imperfections and challenges. Like alternatives, the approach is not comprehensive and may not be capable of covering all research agendas.

Nevertheless, a cultural approach to comparative study of educational organisations is appealing from many angles. First, the concept is applicable at multiple levels – sub-organisational, organisational, local, regional, national and beyond. Its meaning may subtly change across these levels, but few such concepts have such widespread applicability. Secondly, it is topical. As critics of globalisation and internationalisation increase in number, awareness of the importance of cultures and the dangers of underestimating their significance also grows. Thirdly, the study of education and educational organisations specifically, necessarily centres on people and their behaviours – both of which are indistinguishable from, and strongly influenced by, culture. Fourthly, a cultural perspective, more than other approaches, holds promise for breaking the dominant grip that ethnocentric Anglo-American beliefs, understandings, theories and practices currently exert. A major aim of comparative study in the future should be to analyse educational organisations, wherever they happen to be located, according to cultural frameworks and concepts that are not dominated by any one particular cultural or ethnocentric standpoint or baseline. This would yield more authentic comparison and constitute more genuinely useful scholarship.

Comparing Ways of Learning

David A. WATKINS

For over two decades I have been involved in investigations of teaching and learning in different cultures. This chapter describes some of the methodological problems I have faced and some of my findings. In particular the chapter notes what types of comparisons of learning can be justified, and the analytic methods appropriate for conducting such comparisons.

Like most people in the field, my initial approach to educational research was influenced by my background in a basic academic discipline – in my case psychology (and, earlier, mathematical statistics). For psychology, cross-cultural research has always raised a fundamental problem. Psychology is basically the study of individual differences in behaviour, so the natural unit of analysis is the individual. It was soon realised that aggregating the responses of individuals from one culture to represent that culture's score on a variable of interest could lead to what has become known as the ecological fallacy (van de Vijver & Leung 1997).

To illustrate the problem, consider the correlation between death rates from heart attacks and strokes. Clearly at the individual level this correlation is zero since people do not die from both. However, when considered at country level a considerable correlation is found, because in most affluent countries both this cause of death is typically higher than in less developed ones. Moreover, it did not take me long to realise that the laboratory studies of human verbal learning and animal maze learning dominating psychology in the 1970s really said little about how students learn in the reality of the classroom. Experimental studies of learning typically tried to copy the laboratory conditions of the physical sciences by attempting to control all variables except for the independent variable

which would be manipulated to observe its effect on a dependent variable. For example, patterns of reinforcement could be varied to observe the effect on how many nonsense syllables could be learned in a fixed period. Too often, such research seemed to focus on testing often complex theories of unimportant types of learning in artificial conditions and typically with samples of white American college students. I could see little point in perpetuating such trivial research.

A Personal Journey

I was drawn to this research area in the late 1970s, when I became aware of the work of researchers such as Marton and Säljö (1976) and Biggs (1979). I was not alone in being influenced by these papers, as both have been identified as amongst the most widely cited in the entire literature of educational psychology. What struck me about these researchers was that they wanted to find out about learning from the learner's perspective rather than from that of the researcher. This has become known as the second-order perspective (Marton & Booth 1997).

These researchers, though all from a psychological background, approached their task in very different ways. Marton and Säljö asked a group of Swedish university students to read an academic article and then answer questions about what they had learned and how they had learned it. Through in-depth interviews, they found out that these students reported two main ways of tackling this task. Some tried to memorise details or key terms in order to be able to answer subsequent questions. They tended to focus on the reading at word or sentence level. Most of the other subjects tried to understand the message that the passage was trying to impart. They tended to focus on the themes and main ideas, and generally tried to process the reading for meaning. These intentions and their associated reading strategies were called "surface" and "deep" approaches. Significantly, the researchers also reported qualitative differences in learning outcomes, depending on the approach to reading that had been utilised. Students who had adopted a surface approach typically could not explain the authors' message and could only recall isolated factual fragments of the passage. Those adopting a deep approach were able to provide a more sophisticated overview of the authors' intentions, and frequently used extracts from the reading to support their reasoning.

The Swedish researchers went on to develop a qualitative approach to research which they called phenomenography (Marton 1981).

This approach aims to understand how students perceive the content and process (the “what” and “how”) of learning. The underlying rationale is the phenomenological notion that people act according to their interpretations of a situation rather than to “objective reality”.

Biggs in Australia and Entwistle in the UK developed, relatively independently, learning process inventories which owed a debt to the paper by Marton and Säljö (1976) and to later phenomenographic writing by adopting the “surface/deep” and “approaches to learning” terminology. Biggs (1987), in developing his Learning Process Questionnaire (LPQ) and its tertiary counterpart, the Study Process Questionnaire (SPQ), and Entwistle and Ramsden (1983) in their Approaches to Studying Inventory (ASI) added a third approach, “achieving”. Students adopting this approach tried to achieve the highest possible grades by such strategies as working hard and efficiently, and by being cue conscious. They would use any strategy, including rote memorising lots of facts or understanding basic principles, that they perceived would maximise their chances of academic success.

With my own statistical and mainstream psychological background, I followed the Biggs/Entwistle approach; and indeed I provided some of the early supporting reliability and validity evidence for their questionnaires. While much of my early work was on factors influencing the learning of Australian university students, which was what I was employed to do at the time, I also undertook parallel studies at the Filipino university where my wife had graduated. I was quickly able to show that the learning questionnaires I had used in Australia were suitable for use with Filipino students in terms of reliability and factor validity; but I was more concerned with the validity of comparing the raw scores of Australian and Filipino students on these questionnaires.

When I referred to the cross-cultural psychology literature, I realised that what I was concerned about was known as the problem of measurement equivalence. The issues involved were clarified for me by a paper by Hui and Triandis (1985). These authors argued that when psychological measuring instruments were used in different cultures, there was a range of types of equivalence which needed to be demonstrated, each of which could justify corresponding types of interpretations. At the basic level, the concepts involved had to be equivalent in both cultures or we were just wasting our time using such questionnaires to compare these cultures.

The highest level of equivalence is known as metric equivalence. This means that a raw score of a respondent from one culture is equivalent mathematically to that from another culture. For example, a score of 19 by a Nepalese student on the Surface Strategy Scale of the SPQ means that that student's use of surface strategies is the same as an Australian student who also scores 19 on that scale. Unfortunately such metric equivalence is almost impossible to demonstrate, but we know that there is one major reason why it should not be assumed: the existence of response sets which operate differently across cultures. Thus we know that whatever questions are asked, respondents from different cultures are likely to differ to the extent that they will agree with the question statement, provide socially desirable responses, or use extreme rating points. While such response sets tend to cancel out within a culture, they tend to confound cross-cultural comparisons of raw scores (for details, see van de Vijver & Leung 1997). In addition, the statistical tests typically used to compare means assume that random sampling has been used, which is seldom possible in real-life classroom settings. Moreover, when comparisons are to be made across cultures, the samples selected need to be representative of students and teachers in these cultures. This is seldom achieved, and so such comparisons must be treated with caution (at best!).

At an intermediate level of equivalence, if responses to the instrument could be shown to be reliable and valid for each culture, then it would be justifiable to compare correlations between the constructs measured and other variables within each culture. For example, a comparison could be made of the correlations between scores on the LPQ Deep Strategy Scale and academic achievement of like students in the Philippines and Australia. Such correlations would allow me to compare the relationships between approaches to learning and other important psychological and educational variables across different cultures. It would allow me to test the validity of a number of Western theoretical propositions in non-Western cultures. This realisation led me to begin one of my long-term research programmes, and has culminated in several papers which I have labelled "cross-cultural meta-analyses" (see, e.g. Watkins 1998, 2001).

Comparing Correlates of Learning Strategies

The first stage in this programme of work was to establish that the concepts involved were relevant for different cultures, and that the instruments

used were reliable and valid for use with respondents from these cultures. This required attention to conceptual equivalence, reliability, within-construct validity, and a number of other matters.

Conceptual Equivalence

The notions of conceptual equivalence are closely related to “etic” and “emic” approaches to research (Berry 1989). The etic approach seeks to compare cultures on what are thought to be universal categories. By way of contrast, the emic approach uses only concepts that emerge from within a particular culture. It is associated with the traditions of anthropology, but also recently those of indigenous psychology (Kim & Berry 1993). Triandis (1972) has pointed to the dangers of “pseudo-etic” research which involves the imposition of the concepts of one culture upon another as if they were universal without any prior research into the veracity of this assumption.

Psychologists claim that they can identify problems with conceptual equivalence primarily through comparing the distribution of responses to a questionnaire by respondents from different cultures (van de Vijver & Leung 1997). The methods of item-bias analysis that they advocate can indeed highlight problems with the wording of different items. However, this approach to my mind missed the central question: were the concepts equivalent?

It seemed clear to me that assessment of the conceptual equivalence of the constructs underlying learning instruments such as the SPQ required qualitative analysis, such as phenomenography. Such studies in non-Western cultures have been conducted with non-Western students in China, Hong Kong, Japan, Malaysia, Nepal and Nigeria, and at the University of the South Pacific.

To illustrate, several studies support the proposition that the concepts underlying the theorising of Biggs and Entwistle are relevant to Nigerian students. An ethnographic study based on 120 h of observations in Lagos primary schools claimed that Nigerian pupils were trained to believe that getting the right answer by any means, even cheating, was the essence of learning (Omokhodion 1989). Neither the teachers nor the pupils considered that the processes of understanding the problem and of obtaining the solution were of any importance. Thus it was concluded that a superficial, surface approach to learning was being encouraged. Further evidence came from a study in which 250 Nigerian university students responded to the question “What strategies do you use to

study?" (Ehinderer 1990). Content analysis indicated three main themes in the students' responses: diligence, building up understanding and memorising content material without understanding. These themes seem to correspond to the notions of achieving, deep and surface approaches to learning.

Qualitative investigations of the learning approaches and conceptions of Chinese learners in Hong Kong and China (e.g. Kember 1996; Kember & Gow 1991; Marton et al. 1996; Marton et al. 1997; Dahlin & Watkins 2000; Watkins & Biggs 2001) have partially supported the conceptual validity of the constructs of deep and surface approach for Chinese students. However, they have all concluded that Chinese students tend to view memorisation as relevant to both approaches, whereas Western students are more likely to view memorisation as characteristic of a surface approach. Research in Nepal (Watkins & Regmi 1992, 1995) concluded that while deep and surface approaches were relevant for the sampled Nepalese students, the concept of learning as character development emerged at a lower cognitive level than in Western studies. So it may be fair to conclude that while the constructs of deep and surface approaches to learning are relevant to non-Western cultures, culturally specific aspects of these constructs must also be considered.

Reliability

The responses to any measuring instrument need to be assessed for reliability in the culture in which it is used. I have been able to demonstrate fairly strong support for the reliability of responses to the SPQ, LPQ and ASI in a range of cultures. Thus I reported satisfactory internal consistency reliability estimates with coefficient alphas for responses to the SPQ scales by 14 independent samples of 6,500 university students from 10 countries generally exceeding 0.50 (Watkins 2001). This magnitude would be widely considered acceptable for a research instrument used for group comparisons, but well below the level required for important academic decisions about an individual student (Nunnally 1978). Not surprisingly, the reliability estimates were slightly higher for Australian students for whom it was developed, and particularly low for the Nepalese for whom the concepts may not have been as relevant and whose level of English competence was relatively low.

Within-Construct Validity

The within-construct validity of the LPQ and SPQ has been demonstrated by comparing the results of internal factor analysis of responses to the LPQ and SPQ scales for different cultures both with each other and with the theoretical model expected. Thus, confirmatory factor analysis of responses to the LPQ, which shares the same underlying motive/strategy model as the SPQ, by 10 samples of school students from six different countries confirmed the two basic factors of deep and surface approach (Wong et al. 1996). A review of the factor analytic studies by Richardson (1994) also supports the cross-cultural validity of the ASI as a measure of deep and surface approaches.

The Cross-Cultural Meta-Analysis

The purpose of this research was to use quantitative synthesis in the meta-analytic tradition (Glass et al. 1981) to test the cross-cultural relevance of variables proposed in learning theory to be significantly correlated with surface, deep and achieving approaches to learning. According to Biggs (1987), how a student learns depends on presage factors related both to the person and to the learning environment. In particular, the following relationships were examined from a cross-cultural perspective:

- *Correlates with academic grades.* It would be expected that the students' approaches to learning would influence their academic performance. In particular, it is predicted that in any culture a surface approach would be significantly negatively correlated with academic achievement. It is further predicted that deep and achieving approaches will be positively associated with grades (Biggs 1987; Schmeck 1988). However, it is recognised that these relationships assume that higher-quality learning outcomes are rewarded by the assessment system, which unfortunately is often not the case.
- *Correlates with self-concept and locus of control.* Students who are more self-confident, particularly with their academic abilities, and who accept greater responsibility for their own learning outcomes are more likely to adopt deeper, more achieving approaches to learning. These approaches require them to rely more on their

own understanding of the course materials rather than being overly dependent on the teacher or textbook (Biggs 1987; Schmeck 1988).

The first stage of any meta-analysis is to select the studies to be quantitatively synthesised. A decision to be made at this stage is whether only studies satisfying some predetermined quality criteria should be included and, of course, what such criteria should be (see, e.g. Slavin et al. 1987).

In this research all studies which reported correlates of at least one approach to learning and measures of self-esteem, locus of control and/or academic achievement (or where it was possible statistically to estimate such correlations from the data provided) were included, provided responses to the scales showed a reasonable level of internal consistency (alphas of at least 0.50) for the culture being studied. This set of criteria led to four studies being discarded. The collection of studies was obtained both by formal searches of established CD-ROM databases and by more informal means such as hands-on search of the extensive journal collection in the library of the University of Hong Kong, requests for relevant published and unpublished material at international conferences, and letter and e-mail appeals to established researchers in the area.

Another issue in this type of meta-analysis is whether scales from different instruments are really measuring the same variables and so can be combined. In this meta-analysis a number of different learning process instruments were assumed to be assessing a student's approach to learning as their test constructors claimed. In addition different measures of self-esteem, locus of control and academic achievement (measured by school tests, grade-point average, standardised achievement tests, etc.) were assumed to be measuring the same variable.

Once all the studies to be included had been identified and the relevant correlations obtained, average correlations were calculated. One of the main aims of meta-analysis is not just to obtain an overall estimate of the strength of a relationship but often, more importantly, to find out if the relationship varies according to the characteristics of the sample. It is hoped that this may provide insights into the nature of a relationship. This study hoped to find out whether the relationships between approaches to learning and the other variables of interest varied between Western and non-Western samples and at school and university level.

Turning to the results of the meta-analysis, the average correlations between approaches to learning and academic achievement, self-esteem and internal locus of control, respectively, are shown in Table 13.1.

Separate analyses were also done for school and university students and different measures of the variables concerned.

- *Approaches to learning and academic achievement.* The average correlations based on data from 28,053 respondents (from 55 independent samples in 15 countries) were -0.11 , 0.16 and 0.18 with surface, deep and achieving approaches respectively. The average correlations appeared to be somewhat higher (particularly at school level) for Western samples. While the relatively low correlations found between approaches to learning and actual academic achievement were disappointing, this was not unexpected because school and university grades often reward superficial learning outcomes. The relationship between deeper approaches to learning and higher-quality learning outcomes has been shown to be much higher (Watkins & Biggs 1996).
- *Approaches to learning and self-esteem.* The average correlations based on data from 8,710 respondents (involving 28 independent samples in 15 countries) were -0.05 , 0.30 and 0.28 with surface, deep and achieving approaches respectively. The average correlations with deep and achieving approaches exceeded 0.25 for all subsamples, but were particularly strong (0.33) for Western university students with deep approaches.

Table 13.1: Average Correlations between Learning Approach Scales and Academic Achievement, Self-Esteem and Locus of Control

Groups	Sample size	Surface approach	Deep approach	Achieving approach
Academic achievement				
Western	11,023	-0.13	0.18	0.21
Non-Western	17,030	-0.10	0.14	0.16
Total	28,053	-0.11	0.16	0.18
Self-esteem				
Western	5,478	-0.03	0.33	0.30
Non-Western	3,232	-0.08	0.27	0.25
Total	8,710	-0.05	0.30	0.28
Locus of control				
Western	4,339	-0.15	0.10	0.15
Non-Western	8,673	-0.22	0.09	0.11
Total	13,012	-0.20	0.09	0.12

Source: Adapted from Watkins (2001).

- *Approaches to learning and internal locus of control.* The average correlations based on data from 13,012 respondents (involving 27 independent samples in 11 countries) were -0.20 , 0.09 and 0.12 with surface, deep and achieving approaches respectively. Further analysis showed that the negative correlation with surface approach may be higher at school level in both non-Western and especially Western samples. For the latter, the correlations with both deep and achieving approaches were much higher at university level.

In summary, this cross-cultural meta-analysis showed that the correlates of approaches to learning and academic achievement, self-esteem and locus of control were similar across a range of Western and non-Western schools and universities, and also across a range of measuring instruments. This both supports the cross-cultural validity of Western theorising in this area and suggests that Western interventions designed to improve the quality of learning strategies based on such theorising may also be appropriate for non-Western students.

The Paradox of the Asian Learner

The value of qualitative methods for interpreting comparisons of student learning across cultures is well illustrated by research into the so-called "paradox of the Asian learner". This "paradox" starts with a seemingly simple syllogism:

1. Asian students use rote learning more than Western students.
2. Rote learning leads to poor learning outcomes.
3. Therefore, Asian students have poorer learning outcomes than Western students.

The problem is that all comparisons of international performance show, if anything, that the reverse is true: students from Singapore, Japan, Taiwan and Hong Kong typically surpass their Western peers in tests of achievement in a range of subjects (see, e.g. Beaton et al. 1996; Stevenson & Stigler 1992; Watkins & Biggs 2001). It seems that the conclusion of the above syllogism is incorrect, and so must be at least one of the premises.

The evidence for the claim about rote learning comes from reports of examiners and teachers of such students in Asian and Western countries. For example, examiners in various subjects at the main public examinations in Hong Kong often complain about the model answers given by

candidates – in some cases, hundreds of students from the same school giving the same long answer word for word. Western university lecturers have also commented on the model answers learned by heart by many Asian students, who the lecturers criticised as rote learners.

However, comparisons of responses to questionnaires such as the LPQ, SPQ and ASI by Hong Kong, Malaysian and Nepalese students with those of Australian students typically found that the latter reported using surface strategies far more than their Asian peers (Biggs 1992; Kember & Gow 1991; Watkins et al. 1991). This naturally brought the first premise into doubt. Yet this writer does not consider this to be the solution to the paradox. Such comparisons must themselves be questioned. They assume metric equivalence which, as argued above, is hard to justify.

Rather, the likely explanation to the “paradox” lies in cultural differences in the perception of the relationship between memorising and understanding (Watkins & Biggs 1996). While Western education had in the past depended on rote learning, Western educators today reject such learning. In doing so, many have failed to draw a distinction between *rote* learning, i.e. memorising “without thought or understanding” (*Oxford English Dictionary*), and *repetitive* learning, i.e. learning in order to enhance future recall alongside understanding. Memorising without understanding undoubtedly leads to very limited learning outcomes, but many Western teachers mistakenly assume that when Chinese students memorise, they are rote learning at the expense of understanding. In fact, Chinese students frequently learn repetitively, both to ensure retention *and* to enhance understanding. On the basis of in-depth phenomenographic-style interviews with teachers and students in Hong Kong and China, it became clear first that many of the teachers and better students do not see memorising and understanding as separate but rather as interlocking processes, and second that high-quality learning outcomes usually require both processes as complements to each other (Kember 1996; Marton et al. 1996; Marton et al. 1997). This was the solution to the paradox. Chinese students were observed correctly as making great use of memorisation, but were not necessarily rote learning, as their Western teachers supposed. Many Chinese students actually develop their understanding through the process of memorisation, and so can perform well academically.

This theme was taken up by Dahlin and Watkins (2000). Through in-depth interviews with Western international school and Chinese-system secondary school students in Hong Kong, we showed that Chinese students, unlike their Western counterparts, used repetition for two

different purposes. On the one hand it was associated with creating a “deep impression”, and thence with memorisation; but on the other hand it was used to deepen or develop understanding by discovering new meaning. The Western students on the other hand tended to use repetition only to check that they had really remembered something. This finding was consistent with another cross-cultural difference identified by Dahlin and Watkins (2000). Whereas Western students saw understanding as usually a process of sudden insight, Chinese students typically thought of understanding as a long process that required considerable mental effort.

Conceptions of Teaching: A Chinese Perspective

In our earlier work, Biggs and I focused on Chinese students (Watkins & Biggs 1996), but we also recognised that Chinese teachers must be doing something right to help bring about learning outcomes that were commonly superior to those in Western schools. It did not take us long to realise that the relationship between teacher and student is fundamental to understanding the role of the teacher in Chinese classrooms. According to Chinese tradition, the relationship between teachers and students is akin to that of parents and their children. This is an area where Western observers often see only part of the picture. Thus, the comment by Ginsberg (1992, p. 6) that a lecturer in China is an authority figure, “a respected elder transmitting to a subordinate junior”, certainly has a ring of truth. However, the typical method of teaching is often not simple transmission of superior knowledge but utilises considerable interaction in a mutually accepting social context.

An important cross-cultural difference in the perception of what teaching involved was presented by Ho (2001). She used a survey to compare Australian and Hong Kong secondary school teachers, and found that while the former saw their role as restricted primarily to instruction within the classroom, the latter saw their role as extending to the students’ domestic problems and behaviour outside the school.

Further work confirmed the widespread conception that Chinese teachers should be of good character, as well as concerned with the moral development of their students (Gao & Watkins 2001). A major aim of that study was to develop a model of conceptions of teaching appropriate for secondary school physics teachers in China’s Guangdong Province. After numerous in-depth interviews, classroom observations and a pilot

quantitative survey, we developed a model with five basic conceptions (knowledge delivery, examination preparation, ability development, attitude promotion and conduct guidance). The first two of these were grouped into a higher-order "moulding" orientation which corresponded fairly well with the "transmission" dimension identified in Western research (see, e.g. Kember & Gow 1994). The remaining three lower-level conceptions were grouped by Gao and Watkins into a higher-order "cultivating" orientation. This not only involved a concern with developing student understanding and higher-quality learning outcomes, as in the "facilitating" dimension of Kember and Gow, but broadened it to focus on affective outcomes such as developing the student's love of science and also moral (not ideological) aspects such as their responsibilities to their families and society as a whole.

Cultural differences were further exposed in a study of British and Chinese secondary school students by Jin and Cortazzi (1998), using both survey and observational methods. The British students characterised a good teacher as one who is able to arouse the students' interest, explain clearly, use effective instructional methods, and organise a range of activities. These are very much the teaching skills taught in typical Western teacher education method courses. The Chinese students, by contrast, preferred the teacher to have deep knowledge, be able to answer questions and be a good moral model. In terms of teacher-student relationships, the British students liked their teachers to be patient and sympathetic with students who had difficulty following the lesson, whereas the Chinese students considered that their relationship with a good teacher should be friendly and warm well beyond the classroom.

This perception of Chinese teachers as friendly and warm has been noted by a number of researchers and linked to the Confucian concept of *ren* (Gao & Watkins 2001; Jin & Cortazzi 1998), which translates as something like human-heartedness or love. Indeed, according to Jin and Cortazzi (1998), all education in mainland China is based on Confucian principles even though the teachers and students are often unaware of that. These principles include that education is highly valued by society; learning involves reflection and application; hard work can compensate for lack of ability; the teacher is a model both of knowledge and morality; and learning is a moral duty and a responsibility to the family (see also Lee 1996; Li 2001).

Another study in this area shows how quantitative and qualitative methods can be combined to provide a better understanding of how the

good teacher is viewed in different cultural contexts (Watkins & Zhang 2006). The great majority of our 128 respondents were Chinese students but studying either in regular Hong Kong Chinese secondary schools or American international secondary schools in Hong Kong. In the latter case most of the teachers were American, and the pupils studied in English using an American syllabus. Following the approach to research utilised by Beishuizen et al. (2001), the students were first each asked to write a short essay about "The Good Teacher". These essays were then content analysed, and the constructs utilised were identified. Each essay was then re-scored "0" or "1", depending on whether that essay used each of these constructs in turn. Thence dual scaling was used to identify dimensions of the good teacher used by these respondents. Two dimensions were easily identifiable. The first referred to characteristics such as keeping promises, being responsible and being honest, while the second referred to having deep knowledge, organising a variety of learning situations and giving students freedom. Consistent with previous findings, the international school students were much higher on the second dimension but lower on the first. Thus it seems that just the contact with a Western educational context was sufficient for these Chinese students to view teaching from a more "Western" perspective.

Conclusions

This chapter has illustrated some methodological issues involved in comparing learning across cultures by describing some of my own and colleagues' work. Much of the literature in this area uses the methods and theories of psychology. I have shown how, once educational psychologists emerged from the laboratory and started using second-order research methods based on the perspective of actual students and teachers, researchers were able to make real progress in understanding the processes of learning in Western classrooms. However, most of this work used the individual students or teachers as the unit of analysis. Thus, like psychology in general, these methods were not so suitable for comparisons across cultures.

In my opinion, comparisons of means from instruments designed to measure most, if not all, psychological constructs related to learning must be questioned due to problems of metric equivalence and sampling. Fortunately, to test whether most theories and training programmes are appropriate in different cultures requires only comparisons of correlations

across cultures (see Table 13.1) or of means within cultures. Such analyses require less stringent tests of conceptual equivalence and the reliability and validity of the instrument(s) for respondents of each culture being studied.

I have also shown how newer methods using a qualitative approach (or a combination of quantitative and qualitative) can be adopted to explore the meaning of concepts such as learning across and within cultures (and thus of testing conceptual equivalence). Such in-depth research, in my view, is required if we are validly to compare the processes of learning across cultures. It may also be the best hope to provide the basis for developing training programmes suitable for improving the quality of learning outcomes in different cultures.

Comparing Pedagogical Innovations

Nancy LAW

Innovation seems to be a constant – and necessary – theme in education. In the contemporary era, a common underlying rationale is that changes in education of all levels and types are necessary to prepare citizens for life in the knowledge society, which is characterised by increasing globalisation, progressively shorter half-lives of knowledge, the increasing importance of knowledge creation in sustaining development, and economic competitiveness which requires increased collaboration in the workplace (Riel 1998). As the creation and dissemination of knowledge are perceived to be of paramount importance, education not only has to go beyond the framework of initial schooling but also requires new goals and processes. This view is held not only in industrialised countries (see, e.g. European Round Table of Industrialists 1997), but also in less developed countries (see, e.g. Gregorio & Byron 2001; UNESCO 2003b).

Another prominent trend in education policy around the world is the increasing importance of, and changing perspectives on, the role of Information and Communication Technology (ICT). The introduction of computers in classrooms started around the early 1980s to give students opportunities for *learning about ICT* as a subject in the school curriculum. It was followed by an additional goal of bringing about more effective *learning with ICT*, including multimedia, the internet and the web, as a medium to enhance instruction or as a replacement for other media. At this time, ICT did not significantly change beliefs about the approach to teaching and learning; but during the early 1990s, policy priority for ICT use in schools began to shift towards *learning through ICT*. This demanded the integration of ICT as an essential tool into curricula, such that the teaching and learning would not be possible without it. This educational

role of ICT use is perceived as essential to support the vision of nurturing new competencies and qualities of learners for the 21st century, and is evident in many of the ICT master plans (see, e.g. President's Committee of Advisors on Science and Technology Panel on Educational Technology [USA] 1997; Singapore Ministry of Education 1997; Danish Ministry of Education 1997; Education & Manpower Bureau [Hong Kong] 1998; Korean Ministry of Education 2000).

Against this background of rapid change and strong initiatives for reform and innovation, research in these areas has become increasingly prominent. In particular, two large-scale international comparative studies of education innovation using ICT were conducted during the 1990s. One was conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA) and focused on a comparison of pedagogical innovations using ICT, and the other was conducted by the Organisation for Economic Co-operation and Development (OECD) and focused on whole school changes facilitated by ICT. The former, the Second Information Technology in Education Study Module 2 (SITES M2) encountered major methodological challenges. This was largely because comparative studies of education had in the past placed much greater emphasis on the organisation and provision of education (Broadfoot 2000), and pedagogy had been relatively neglected. Alexander (2001, p. 509) declared that pedagogy is "perhaps the most prominent of the themes which comparativists have tended to ignore".

This chapter first provides an overview of the methods that have been adopted in the literature on comparative studies of pedagogical practices. It then reports on the various methods used by researchers to analyse the SITES M2 case studies on innovative pedagogical practices using ICT. Finally, the chapter discusses how these different methods together may help reach a more comprehensive understanding of pedagogical innovations in general, and in particular those that make use of ICT.

Research on Educational Change, Reform and Innovation

Changes take place in organisations for many reasons, and may be reactive rather than purposive (Dill & Friedman 1979). Innovation is a specific subset of change. It may be defined as a tangible product or procedure that is new and intentional, and that aims to lead to benefit (Barnett 1953;

King & Anderson 1995). Reforms refer to innovations which are typically initiated from the top of organisations or from the outside (Kezar 2001).

Within this broad framework of seeing innovation as deliberate change with specific goals, different operational definitions have been adopted by different researchers according to their own foci and orientations. Research examining the degree of change has distinguished between first- and second-order changes (Goodman 1982; Levy & Merry 1986). The former refers to changes which result in minor adjustments and improvements in one or a few dimensions of the organisation, either at group or individual levels. The latter refers to transformational change involving the underlying mission, culture, functioning processes and structure of the organisation. Second-order change is sometimes referred to as organisational transformation or paradigmatic shift.

Another major research orientation is on innovation as a process, examining the behaviours and incidents that occur over time. For example, Thompson (1965) defined innovation as the generation, acceptance and implementation of new processes, products or services for the first time within an organisational setting. A variety of models of educational change have been developed, focusing on different aspects of the change process (Ellsworth 2000). Some focus on the stages of innovation adoption at individual teacher level, such as the Concerns-Based Adoption Model (Hall & Loucks 1978; Hall et al. 1979). Others present models of innovation diffusion through organisations (e.g. Rogers 1995) and at system level (e.g. Reigeluth & Garfinkle 1994).

Innovation is not necessarily good, and critical examinations of innovations contribute important insight to understanding, as exemplified by the case studies of educational innovation in less developed countries presented by Lewin and Stuart (1991). The case studies were concerned primarily with the introduction of new curriculum initiatives or teacher professional development projects at a system/structural level, and the changes were examined from historical, political and cultural perspectives. Within the book, Lewin (1991) highlighted two themes in the context of modernisation: evaluating the intentions of the agents of change, and evaluating the results of change. Lewin further pointed out the significance of the social perspective taken in such evaluations.

Various approaches to research can also be found in studies of innovations involving ICT use in schools. These include studies of enabling factors associated with success (e.g. Hoffman 1996; Dawes & Selwyn 1999), and studies on barriers to implementation (e.g. Zammitt 1992; Robertson

et al. 1996). Some studies have considered the implementation in the context of whole schools (e.g. Ridgeway & Passey 1995; Kennewell et al. 2000), while others have examined the effects of government policies and other external influences (e.g. Selwyn 1999). Studies have also focused on the attitudes and needs of individual teachers in relation to using computers for teaching and learning (e.g. Davis et al. 1989; Preston et al. 2000).

As expected, many of the educational innovations reported in the literature involved pedagogical changes. However, studies that focus on pedagogical characteristics of innovations often involve cases where the innovations share similar pedagogical philosophies, methods and/or contexts, and these are generally reported in the literature on learning theories and pedagogy. Comparative studies that focus on the pedagogical characteristics of innovations and that encompass diverse approaches and philosophies are rather rare.

SITES MS: An International Comparative Study of Pedagogical Innovations

The positive impact of ICT does not arise as an automatic consequence of IT adoption in the classroom. Rather, it requires significant changes in pedagogical practice, including the roles of teachers and students (Riel 1998; Bransford et al. 1999). SITES introduced the concept of *emerging pedagogical paradigm* (Pelgrum & Anderson 1999), to highlight the expectation that new pedagogical practices must accompany the implementation of ICT in teaching and learning if new goals of education are to be achieved. The SITES M2 study was an international comparative study of innovative pedagogical practices using technology. An important goal was to help show how ICT can transform classrooms to prepare students better for the future, benefiting from innovative cases of ICT use in schools around the world.

Criteria for Case Selection of Innovations

The identification and selection of cases were conducted by the participating country teams based on four agreed international criteria: (1) there was evidence of significant change in the roles of teachers and students, the curriculum goals, the assessment practices and/or the educational materials and infrastructure; (2) technology played a substantial role in

the practice; (3) there was evidence of measurable positive student outcomes; and (4) the practice was sustainable and transferable. In addition, the cases had to be considered as innovative based on a set of nationally established criteria, since innovation depends very much on cultural, historical and developmental contexts.

The International Study Consortium did provide some suggestions for consideration by the National Selection Panels responsible for setting up the nationally established criteria for innovation and the subsequent selection of the cases to be studied. The suggested criteria included promoting active, independent and self-directed learning, providing students with information and media skills, engaging students in collaborative, complex, real-world problems, “breaking down the walls” of the classroom to involve other people in education processes, promoting cross-curricular learning, addressing individual learner differences, providing students with individualised self-accessed learning opportunities, addressing equity issues, and improving social cohesiveness and understanding. The national selection panels, as agreed by the participating country-teams, consisted of education professionals such as government officers, school principals, information technology coordinators, experienced teachers and university researchers.

The criteria for case selection did not specify the origins of the innovations. Thus the selected cases might have resulted from top-down reform initiatives at the national or international level, or they might have been bottom-up cases of innovation initiated by classroom teachers. Both types of innovation were present among the 174 case studies that were reported by the 28 participating country teams.

Case Study Methodology

SITES M2 was based on in-depth case studies, i.e. intensive descriptions and analyses of bounded systems or units for the purpose of gaining deep understanding of the situations and meanings for those involved. In such work, the research interest is generally in the process rather than the outcome, in describing and analysing the context rather than specific variables, and in discovery rather than confirmation (Merriam 1998). Case studies are particularly suited to uncovering the interaction of significant factors characteristic of situations or phenomena where the variables involved cannot be delineated from their contexts (Yin 1994). The case studies in SITES M2 were designed and analysed using an *instrumental* approach: the focus of the analysis was to generalise beyond specific cases

on underlying issues, relationships and causes to address targeted research questions (Kozma 2003a).

In case-study research, much of the analysis is usually done in the course of writing the case report (Miles & Huberman 1994). In SITES M2 the case reports formed the sole basis for international cross-case analyses, as it was not possible, for reasons of language and resources, to refer back to the original data. Each case report was submitted in two formats: narrative and data matrix. The narrative format is the most common in case-study research, and usually comprises a combination of description and analyses. In the SITES M2 design, the main emphasis of the narrative report was on description. The data matrix component of the report was designed in this study as a “slot-filling” approach, i.e. the report comprised short answers to a series of structured questions organised around the conceptual framework and presenting evidence on classroom practice.

A set of case-report guidelines was provided to all National Research Coordinators (NRCs), and the report writing was recommended to be a two-step process. The data matrix was to be used as a first step in the reduction and organisation of the various data sources collected. The second step was the conversion of the matrix to a case narrative following a standardised, highly structured format, comprising sections on curricular goals, teachers’ and students’ practices and outcomes, context, sustainability and transferability (Kozma 2003a). All of the 174 case reports can be found at the SITES M2 Study website, http://sitesm2.org/sitesm2_search/.

Methods for Comparing Pedagogical Practices

Alexander (2000, p. 510) suggested that one reason for the lack of comparative research on pedagogy was that such comparison “demands kinds and levels of expertise over and above knowledge of the countries compared, their cultures, systems and policies”, and that pedagogy is a large and complex field of study in its own right. In this section, three comparative studies of pedagogy that differ greatly in terms of scale, purpose, research paradigm and method are featured to highlight the diversity of such studies in the literature.

Linking Pedagogy with School- and System-Level Characterisations

Alexander’s (2000) “Five Cultures” study was arguably exemplary in its approach to the examination and cross-referencing of data and analysis at

the levels of system, school and classroom. The study was conducted between 1994 and 1998 in England, France, India, Russia and the USA. It was underpinned by a strong belief that what teachers and students do in classrooms both reflects and enacts the values of the wider society. From this flowed the view that comparative studies of pedagogy should not be confined to what happens within classrooms, but should be comprehended as practices within the school, local and national contexts. Comparison at the system level examined the history, policy, legislation, governance, control, curriculum, assessment and inspection in each country, since these were expected to exert powerful pressures towards similarity in pedagogy within each country. At the school level, Alexander identified characterisations along five dimensions:

- School buildings, and how space was organised
- The organisation of school time (concentrated or dispersed, elastic or rigid, lesson length regular or irregular, lessons short or long)
- The organisation of people (including both adults, i.e. staffing structure and power relationships, and children, i.e. class sizes and the way pupils were organised and grouped)
- The idea of a school as held by the teachers (i.e. what they held to be the primary values and functions of schools)
- External relationships (i.e. the way schools viewed and related to parents, families and communities and how they handled demands and expectations)

At the classroom level, the study compared pedagogical practices in terms of:

- Lesson structure and form
- Classroom organisation, tasks and activities
- Differentiation and assessment of pupils
- Routines, rules and rituals
- The organisation of interactions (including whole class, group or individual; interaction mode; and direct instruction, discussion or monitoring)
- Timing and pacing
- The learning discourse (which reveals how learning was scaffolded and the nature of power and control in the classroom)

Alexander's work illustrated how studies of pedagogy can move between the different levels of interacting contexts from the classroom to the

broadest system level. Comparisons at each level can be illuminated by findings from other levels. However, most comparative studies of pedagogical practice only focus on a subset of the different possible levels of comparison, and they differ in their scale, focus, assumptions and purpose (see also Bray & Thomas 1995).

Video Studies of Teaching as Surveys of Instructional Practice

The video studies of the Third International Mathematics and Science Study (TIMSS) are perhaps the best-known examples of comparative pedagogical studies at the level of classroom interactions (Stigler et al. 1999; Stigler & Hiebert 1999; Hiebert et al. 2003). While Alexander (2000) argued for the authenticity of characterisations of pedagogical practices derived from observations of a small sample of classroom observations across different subjects as typical of a culture, the TIMSS video studies took a very different approach in their comparative studies of mathematics classrooms. Alexander sought to describe, analyse and explain the similarities and differences within and between the approaches to primary education in the five cultures, but the TIMSS video study examined methods of teaching in order to secure normative descriptions of pedagogical practice at a national level.

The methodological approach adopted in these two video studies can be described as “video surveys” in that they were designed as a survey study with random samples of Grade 8 mathematics lessons to arrive at descriptions of how mathematics was taught. They included indicators of statistical errors of the descriptive parameters, and confidence levels for hypotheses about cross-national comparisons. For example, in the 1995 TIMSS video study, data from 231 Grade 8 mathematics lessons in Germany, Japan and the USA were randomly selected from nationally representative samples of teachers from the respective countries, with one lesson randomly selected across the school year to be videotaped per sampled teacher to yield national-level descriptions and comparisons of individual lessons. All lessons were transcribed and then analysed on a number of dimensions by teams of coders who were native speakers of the relevant languages. Analyses reported were based on weighted data, and focused on the content and organisation of the lessons, as well as on the instructional practices used by teachers during the lessons. Stigler et al. (1999) and Hiebert et al. (2003) discussed at length the issues of standardisation in the collection, storage, processing and analysis of

qualitative data to yield statistical results similar to those commonly found in surveys.

Comparisons to Reveal Diversity in Pedagogy and its Relationship with School Factors

Detailed study of educational phenomena within a particular, typical national/cultural setting is one important category of research in the comparative education literature (Broadfoot 1999a). The research by Law et al. (2000) on good practices in using ICT in Hong Kong schools is an example of a comparative pedagogical study that encompassed a comparison of pedagogical practices from two levels, the classroom and the school. Like Alexander's work (2000, 2001), this study was designed with a firm belief that pedagogical practices are strongly influenced by and can only be appropriately interpreted within the context of school- and system-level factors and characteristics. However, unlike the Five Cultures and the TIMSS video studies which aimed to arrive at characterisations of pedagogical practice at a general cultural level, this study sought diversity in pedagogy during a period of flux – the changing emphasis in the goals of education towards the development of lifelong learning ability at the system level and the increasing presence of ICT in classrooms to support teaching and learning. The goal of the study was to capture the widest possible diversity in pedagogy, and to explore possible links between differences in pedagogy with contextual factors at schools such as leadership characteristics and school culture. Since the use of ICT was a focal feature of the pedagogical practices to be studied, random selection of lessons for classroom observation was not appropriate. Instead, the study used purposive sampling based on the preliminary characteristics of case examples collected from a network of informants knowledgeable about the status of ICT adoption in Hong Kong schools.

For the classroom-level analysis, the research team identified typologies of pedagogy based on careful coding of videotaped lessons along six key aspects: roles of the teachers; roles of the students; roles of technology; the interactions between teachers, students and technology; interactions between students; and the exhibited competences of students (Law et al. 2000). These aspects were identified to be important within the education reform rhetoric in Hong Kong (Education Commission 2000b) and in many other locations around the world. Further, it was educationally important to find out whether different typologies of pedagogical roles and interactions were linked to different profiles of learning

outcomes in the form of exhibited learner competences. Based on the grounded theory approach (Strauss & Corbin 1990), Law et al. identified five typologies, or *pedagogical approaches*, from the analysis of the 46 lessons.

As mentioned, this study was also interested in pedagogical practices within the context of system-level changes, i.e. government policies and strategies related to ICT in education. The analysis identified the key distinguishing features that characterised different models of school change, namely the established vision and values, the perceived role of ICT and its impact on the school, and the established culture and reform history of the school. Three typologies or models of change were found in the 19 schools studied. The findings also suggested that the kind of pedagogical approaches adopted in ICT-using classroom practices within schools are closely linked to the change models adopted in the schools.

The three studies presented in this section demonstrate clearly that the method considered to be appropriate for a comparison of pedagogical practices depends very much on the research questions asked, the focal unit of analysis, and the purpose and scale of the study. While most data collected in these three studies were qualitative in nature, the analysis could take on a quantitative, positivistic orientation or an interpretive one. Furthermore, analyses may aim at characterisations of what is typical or representative, assuming that the system being studied is relatively stable; or, conversely, analyses may aim to reveal diversity and look for characterisations that illuminate the models of change and associated outcomes.

Comparing Pedagogical Innovations Using ICT

The SITES Module 1 study conducted at the end of 1998 documented the extent to which schools had adopted ICT in teaching and learning in 26 countries through a survey of principals and technology coordinators (Pelgrum & Anderson 1999). The findings revealed cross-national differences in the levels of ICT infrastructure, the kinds of ICT-using learning and teaching activities, and the obstacles experienced. Furthermore, there was evidence from responses to an open-ended question in the principals' questionnaire that the use of ICT had contributed to the emergence of new curriculum approaches, different roles for teachers and productive learning activities for students (Voogt 1999).

SITES M2 followed this up with a cross-national comparison of case studies of innovative pedagogical practices using ICT in order to gain a

better understanding of the pedagogies that had emerged in different countries. While all the cases in the study were identified by National Selection Panels as outstanding examples of pedagogical innovations using technology, it is legitimate to ask if the case studies reveal different extents of innovativeness, and what conceptual frameworks can be adopted to conduct such comparisons. The SITES M2 official report (Kozma 2003b) did not look for comparisons in terms of levels of innovation. However, two other research teams undertook such comparisons. Mioduser et al. (2003) compared the extent of pedagogical transformation through the use of ICT; and the Hong Kong SITES team compared the levels of innovation of 130 SITES M2 case studies, with ICT use as one of the six pedagogical dimensions for comparison (Law et al. 2003).

Comparing the Extent of Pedagogical Transformation Brought by the Use of ICT
The analysis scheme devised by Mioduser et al. (2003) aimed to study transformational processes in schools that extensively embraced ICT. A core assumption underlying the work of this team was that change resulting from technology adoption would develop from a preliminary level of alternations to the school's routine to achieve an initial *assimilation* of ICT, through a *transitional* level, to achieving far-reaching *transformations* in pedagogical practices and learning processes.

Mioduser et al. (2003) defined four domains of innovation for their analysis, each of which was an important area of impact that ICT had created on various aspects of the school milieu. A rubric was developed to code the levels of innovation for the 10 case studies of ICT-supported innovative pedagogical practices in Israel. The rubric comprised nine aspects, grouped within four different *domains of innovation* in a school's milieu: time/space configuration (including the physical space involved, digital space used and the constraints posed or otherwise on the time dimension of the curriculum), students' roles, teachers' roles; and the impact of ICT on various aspects of the curriculum (content, pedagogical organisation and assessment) respectively. Mioduser et al. (2003) further defined three levels of innovation to reflect the extent to which the use of ICT triggered a gradual departure from previous patterns of work in each of the above nine aspects within the four identified domains of innovation.

Arguably, the most important aspects of pedagogical innovations are those that contribute directly to education in the information society, that is, the change towards more collaborative and self-directed

inquiry-based learning for students, the more facilitative roles for teachers, and the greater connectedness of classrooms (Pelgrum & Anderson 1999, pp. 6–7). Therefore, the levels of innovation in the four domains of innovation as defined by Mioduser et al. (2003) may not contribute equally to levels of “emergence” as described in the SITES study framework. For example, changes occurring in terms of time and spatial configuration may have arisen because of the tyranny of space among learners and teachers, and the extent of transformation possible may also be constrained by the age and level of the students concerned, or simply by the level of technology available. Further, the students’ roles as defined by the framework of Mioduser et al. focused on the levels of innovation in terms only of ICT use, and may not reflect the students’ main roles in the overall pedagogical practice. Therefore, cases with high scores which are thus more “transformative” according to this analysis scheme may not necessarily be pedagogically more exciting or “emergent” than cases with low scores. Furthermore, there is no necessary correlation between the levels of change for the different domains.

Using the framework that Mioduser et al. (2003) developed, Tubin et al. (2003) reported on their analysis of the 10 Israel cases collected in SITES M2. They found that in most schools, the extent of change was not the same for the different aspects of change analysed. A mean overall “level of innovation” was computed for each school across all nine aspects, and the analysis found large variations in score from 2.0 to 4.7. While this mean overall “level of innovation” may not be easily interpretable since it is an aggregate score from rather different domains, the findings indicated that a high level of transformation may not be found in all domains even for cases selected as examples of innovative practice. Another noteworthy finding was that the levels of innovation in the various domains were highly correlated, with the exception of teacher’s role with other teachers, indicating that changes in teachers’ communication and work patterns in the 10 Israeli innovative case studies had little effect on changes in the other aspects. The analysis also showed that didactic solutions had the highest correlation with nearly all other domains, indicating that this was the central domain of innovation for the 10 cases studied out of the four domains identified.

This cross-case comparison of levels of innovation revealed some important patterns. However, it is not clear whether the patterns so detected would be replicated in the other 164 cases collected in SITES M2,

and whether there would be national/regional differences in these patterns. This would be a worthwhile follow-up study.

One important assumption implicit in this comparison framework is that the three levels of assimilation, transition and transformation are descriptive of developmental stages that a school would go through when ICT is introduced into its pedagogical practices. This assumption makes sense if pedagogical innovation is primarily a consequence of ICT adoption. However, the OECD study suggested that ICT is *not* a catalyst for educational innovation, but rather acts only as a lever for change (Venezky & Davis 2002). The primary goal of the OECD case studies was to understand how ICT relates to educational innovation. The study found (p. 40) that ICT

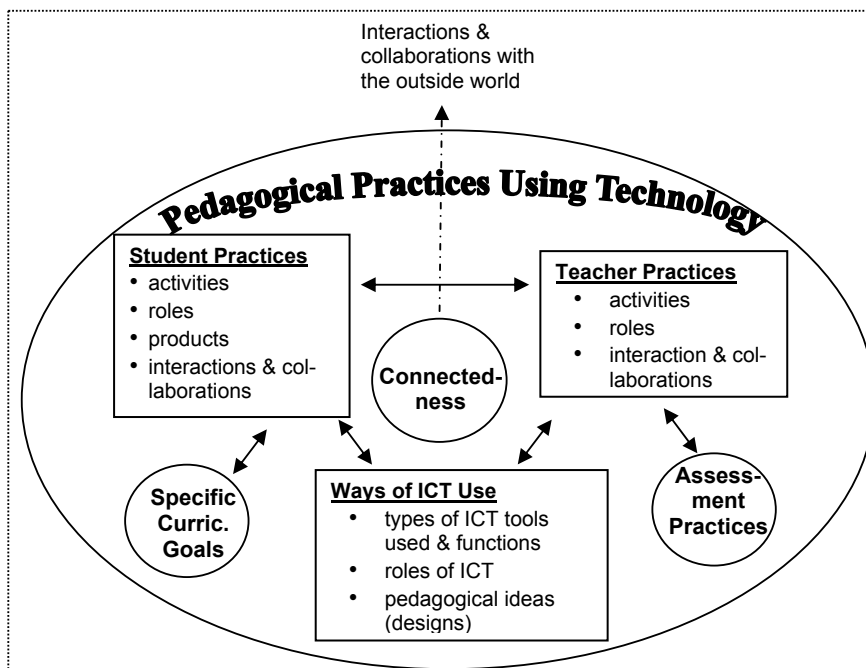
does not, except in unusual circumstances, act as a catalyst for wide scale improvements. Instead, ICT can be a powerful lever for change when new directions are carefully planned, staff and support systems prepared, and resources for implementation and maintenance provided.

It further found that in cases of true school-wide improvement, the forces that drove the improvements also drove the application of technology. If these findings are valid generally for pedagogical innovations, the extent of pedagogical transformation may not be developmental, but rather depends on the educational vision of the school leadership and those involved in the innovations.

Comparing Pedagogical Innovativeness with ICT as One Comparative Dimension

At the core of any pedagogical practice using technology, there are *student practices*, *teacher practices* and *ways of ICT use*, which are generally designed to achieve specific *curriculum goals* and are often linked to *assessment practices*. One emerging characteristic of the innovative practices was the *connectedness* of the classrooms. In many of the case studies, interactions and collaborations between students, teachers and the outside world played an important role, and often the use of ICT was crucial in facilitating the connectedness. The descriptions of the details of the pedagogical contexts and interactions found within the case reports can all be categorised within these six pedagogical dimensions which are highlighted within the oval “pedagogical practices using technology” in Figure 14.1.

Figure 14.1: The Six Key Dimensions in Pedagogical Practices that Use ICT



Adopting the perspective that the primary goal for pedagogical innovation is to prepare learners for life in the 21st century, the Hong Kong SITES research team identified, based on the six pedagogical aspects identified above, six dimensions for comparison: curriculum goals, teachers' roles, students' roles, sophistication of ICT, learning outcomes exhibited and the connectedness of the classroom. They then constructed a rubric for assessing the level of innovativeness for each dimension, specifying the respective pedagogical features along a continuum of innovativeness on a seven-point Likert Scale from the most traditional to the most innovative.¹ The rubric allowed each case study to be scored on its level of innova-

¹ The scoring rubric can be accessed at http://sitesdatabase.cite.hku.hk/i_classroom/P_3_1.htm, with one point given to practices at the most traditional end of the scale, four points given to those at the mid-point of the scale and demonstrating emergence and seven points given to practices at the most innovative end of the scale.

tiveness independently, though it is conceivable that some pedagogical characteristics within one dimension are more related to certain characteristics within another dimension (e.g. collaboration with students and teachers in another country are often associated with the use of Internet-based communication tools). The team used the rubric to analyse 83 of the SITES M2 case studies collected from 28 countries based on an analysis model that conceptualises ICT use as an integral part of curriculum interactions within the context of school, regional and national policies and strategies.

Law et al. (2003) reported large diversities along each of these six dimensions when the case studies were examined. While some of the features observed were very similar to traditional practices, others had rather innovative features that were rarely found in present day classrooms. The research team did not see it appropriate to compute an aggregate innovation score for each case out of the six innovation scores, but developed a graphical representation to provide a bird's-eye view of the team's rating for the extent of innovativeness of each case along the six dimensions. Figure 14.2 shows that the innovation profile for different cases may be rather different.

The innovation profiles indicated that cases rated as highly innovative in all six dimensions were rather rare, and that many were highly innovative in only one or a few dimensions. This probably indicates that in experimenting with novel ways of organising teaching and learning, the change agents in the different practices did not give the same priority to the six dimensions. Based on the innovation scores assigned to the 83 cases, some interesting observations were obtained from an exploration of the means and standard deviations of the innovation scores.

Table 14.1: Mean Innovation Score and Related Descriptive Statistics along Each of the Six Dimensions of Innovation for the 83 Cases analysed by Law et al. (2003)

Dimension of innovation	Mean innovation score	Minimum score	Maximum score	Standard deviation
Curriculum goals	4.18	1	6	1.30
Teacher's roles	4.34	2	7	1.35
Students' roles	4.31	2	7	1.61
ICT sophistication	5.71	5	7	0.74
Multidimensional learning outcomes	4.13	1	7	1.66
Connectedness of the classroom	4.16	1	7	2.06

Figure 14.2: Diagrammatic Representation of the Innovation Profiles for Two of the SITES M2 Cases, Showing the Wide Differences between Cases

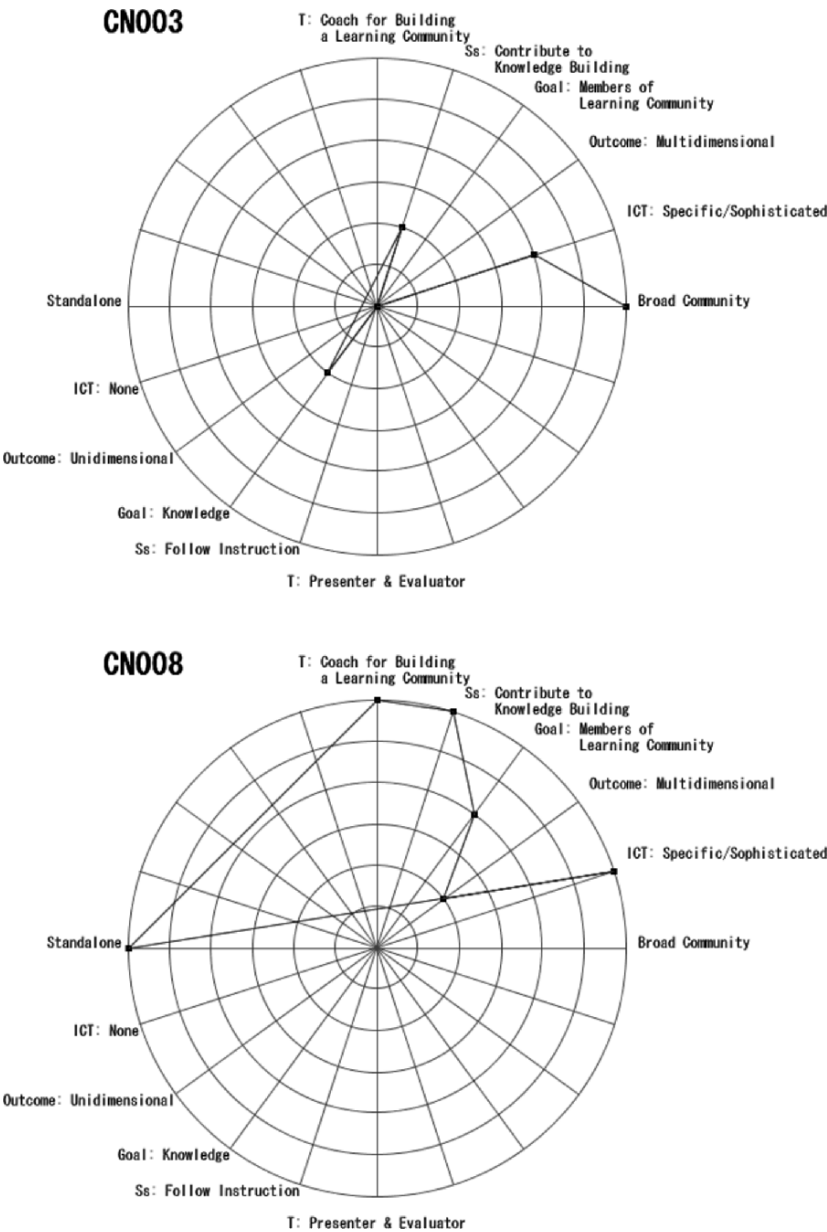


Table 14.1 shows that out of the six dimensions of innovation, ICT sophistication was the dimension that achieved the highest mean innovation score as well as the smallest standard deviation. This indicates that while the overall ICT availability differs greatly in different countries around the world (Pelgrum & Anderson 1999), the cases selected as innovative by the different countries were much more similar in terms of the technology used than any of the other dimensions. Furthermore, the connectedness of the classrooms had the largest standard deviation, indicating that connectedness was possibly more dependent on other factors, such as the prevalent classroom culture, than hardware/software availability and connectivity.

Learning from Comparisons of Extent of Innovativeness

The two approaches to comparing extent of innovation described above provided a deeper understanding of the kinds of changes that had taken place in ICT-using pedagogical practices. Furthermore, Law et al. (2005) demonstrated how the innovation scores provided a framework and measures to reveal regional differences. Their findings revealed sizeable regional differences in terms of the profiles of innovation. In particular, they found that of all the six dimensions, the multidimensional learning outcome score had the lowest mean score for nearly all regions and had a score below the midpoint score of "4" for all regions except Western Europe. This indicated that assessment practices have undergone the least change among the six pedagogical dimensions. Furthermore, the researchers found that Western Europe had the highest mean innovation scores for all dimensions, except for the dimension ICT sophistication. On the other hand, with the exception of the ICT sophistication dimension, the mean innovation scores for Asia were below 4 for all the other five dimensions. Such findings can be further followed up by more in-depth explorations to seek deeper understanding of the regional/cross-national differences. For example, starting from the observation that the Asian case studies were lowest in connectedness while the Western European ones were most connected, Law et al. (2006) conducted further qualitative analysis to reveal significant differences in the roles played by ICT in the innovation cases collected from Hong Kong and Finland. In the Finnish cases, ICT played the core role of providing a scaffold to build up the connectedness between the innovation classrooms and other innovation partners, which was essential to the Finnish innovations. For the Hong Kong innovations, ICT was used mainly as a learning and productivity

tool. Even though internet access was available in all of the Hong Kong innovation schools, its use was confined mainly to information search through the internet. The only communication tools used in the Hong Kong case studies were emails and a discussion forum. On the other hand, all of the Finnish innovations adopted online learning environments that formed an important information and communication infrastructure to scaffold the learning activities and the collaborative interactions between the various parties involved in the innovations.

Characterising Pedagogical Innovations

As described in an earlier section, studies in comparative pedagogy have generally been engaged in building up typologies or categorisations of pedagogical practices. Three approaches to characterising the SITES M2 cases have been found in the literature. One approach is to look for typologies of pedagogical roles and interactions, or *pedagogical approaches*, which was reported in an earlier section on methods to compare pedagogical practices. Law (2004) described the six pedagogical approaches found in the analysis of 130 SITES M2 cases, three of which involved students in productive learning tasks, namely *project work*, *scientific investigations* and *media production*, while the remaining three approaches were more closed ended and better defined, namely *task-based learning*, *virtual schools* and *online courses* and *expository learning*.

The two other approaches that have been used to arrive at characterisations of the SITES M2 cases both employed cluster analysis as a tool for the exploratory analysis. Cluster analysis is an exploratory statistical method to identify relatively homogeneous groups of cases (or variables) based on selected characteristics (Aldenderfer & Blashfield 1984; SPSS Inc. 1999). The two approaches to cluster analysis adopted in the SITES M2 research literature differed in the goals pursued in developing the typology, and hence the kinds of input to and the nature of the clusters explored in the analysis. These two approaches are described below.

Cluster Analysis to Arrive at Overall Typologies

Kozma & McGhee (2003) focused on four main dimensions in building up a characterisation of the ICT-using innovative practices. They did this through coding for each case of the presence or otherwise of 38 features categorised along four dimensions: *teacher practices* (nine features including methods, roles and collaborations), *student practices* (10 features

including activities and roles), *ICT practices* (eight features including the roles and functions played by ICT in the case studies) and the *kinds of ICT used* in schools (11 features encompassing both hardware and software tools). Out of these four dimensions, only two were explicitly linked to the use of technology: the ICT practices employed and the ICT used. The features in other two dimensions, namely teacher practices and student practices, would be present in any pedagogical practice.

K-means clustering on the set of 38 variables was conducted to look for meaningful ways to aggregate the cases. This is an interpretive quantitative procedure which computes iteratively, after being given the assumed number of clusters (N), to provide at the end N cluster means each with their respective cluster membership such that the sum of squared distances of the cluster members from the cluster means of the respective clusters was minimised. Generally, the procedure would be applied several times for different numbers of clusters, and then the researcher would select the solution which appeared to be the most satisfying relative to the goals of the analysis in terms of giving meaning to each cluster and the differentiation between clusters.

Kozma & McGhee (2003) decided that the eight-cluster solution was the most satisfying for their purpose, and used the patterns of features with high-scoring means to decide on a descriptive title for each cluster. They were only able to provide a meaningful title to seven of the clusters: tool use, student collaborative research, information management, teacher collaboration, outside communication, product creation and tutorial. The eighth cluster containing 27 cases (out of a total of 174 cases analysed) hung together only as a consequence of the pattern of low-occurring features. Four cases could not be assigned to any of the clusters by the procedure, and were labelled as outliers.

This analysis, while giving a plausible categorisation of the innovative pedagogical practices collected, was not particularly helpful for providing a characterisation that went beyond surface level descriptions. The cluster titles reflected that the cases were in fact grouped more or less according to the dimension with the highest occurrence of shared characteristics such as tool use and teacher collaboration. In particular, such categorisation did little to extend understanding of pedagogical innovations at either a theoretical or a practical level. The fact that 31 cases (18% of the total) could not be meaningfully characterised was another drawback. Further, two out of the four outlier cases were identified by their respective National Research Coordinators to be “stellar cases” (each

participating country was invited to identify the most outstanding national case to be nominated as its stellar case). This gave strong indication that this approach to categorising the cases failed to highlight the most prominent or innovative features of the pedagogical practices collected.

Clusters Characterising Key Aspects of Pedagogical Practices

Cluster analysis is simply a procedure to help researchers to formulate categorisations on the basis of the profile of features supplied to it. How helpful the outcome is depends importantly on the kinds of features used in the clustering process. As described earlier, Kozma and McGhee (2003) used the entire set of coding for all features related to the practices in the cluster-analysis process. Another approach to characterising innovative pedagogical practices was to perform cluster analysis on features belonging to the same dimension or aspect of the practices. For example, Law et al. (2003) performed cluster analysis on only two of the pedagogical dimensions – teachers' roles and students' roles – out of the six dimensions they coded (the other four pedagogical dimensions being curriculum goals, sophistication of ICT, learning outcomes exhibited, and the connectedness of the classroom). The rationale for such selection was that the change in pedagogical roles lies at the core of pedagogical innovations (Law 2004).

For the teachers' roles, Law et al. (2003) identified 13 different roles in the case studies they coded:

1. Explain or present information.
2. Give task instruction.
3. Monitor.
4. Check students' task progress.
5. Assess students.
6. Provide learning support to students.
7. Develop teaching materials.
8. Design curriculum and learning activities.
9. Select ICT tools.
10. Support/model students' inquiry process.
11. Co-teach, build support team and collaborate with students.
12. Mediate communication between students and experts.
13. Liaise with parties outside school.

Many of the roles, especially at the top of the list, are familiar ones that most teachers play in classrooms. New roles did emerge and are listed

towards the bottom. However, the various roles played by the teachers were probably not mutually independent but were connected with the specific features of the innovative practices. A K-means cluster analysis was conducted on the set of teachers' roles in the 130 case studies they coded. In this procedure, the cluster-solution that the team found to give the most meaningful interpretation of the different cluster characteristics was a five-cluster solution. The cluster labels they gave were:

1. Present, instruct and assess
2. Provide learning resources
3. Administer learning tasks
4. Guide collaborative inquiry
5. Facilitate exploratory learning

Further, these clusters represented varying degrees of change or *emergence* from the traditional roles played by teachers as defined by Pelgrum and Anderson (1999). For cluster 1, the roles played by teachers were very similar to what teachers were expected to do traditionally, and the main change that the teachers had to overcome was technical. The key emerging roles were present more strongly in the practices of teachers involved in clusters 4 and 5. In particular, most teachers in these two clusters were engaged in supporting students in their inquiry work. An examination of the cluster means revealed that most teachers in cluster 5 were giving up some of the traditional roles to focus on supporting students' inquiry, while teachers in cluster 4 seemed to have retained most of the traditional pedagogical roles, such as giving instructions and assessing students. However, they had also engaged in collaborative teaching with fellow teachers, and had exerted tremendous efforts in all of the emerging roles ranging from supporting inquiry to supporting and mediating collaborations. This was certainly not a simple accomplishment on the part of these teachers, and may also explain why this was the smallest of the five clusters, having only 15 cases (Law 2004).

Similarly, Law et al. (2003) identified 17 different roles played by students in the practices, and they found a five-cluster solution to be most satisfactory:

1. Listening and following instructions
2. Engaging in low-level project work involving the completion of well-defined instructional tasks, searching and presenting information

3. Engaging in productive learning involving the design and creation of various types of media products or reports
4. Engaging in online enquiry with remote peers
5. Engaging in general enquiry

Again, some of the students' role clusters were rather traditional (clusters 1 and 2), while the others involved students engaging in roles that have been strongly advocated as characteristic of practices leading to 21st century competences.

It is apparent from the outcomes of the various cluster analysis reported on the SITES M2 data that the characterisations of the in-depth case studies so obtained provided important insight to the understanding of pedagogical innovations. More meaningful characterisations would result if the cluster analysis was to be performed on coding arising from a particular dimension (or aspect) of pedagogical practice rather than on the entire set of codes that one might use to represent all dimensions relevant to a comprehensive description of pedagogical practices.

Conclusions

Many education reform efforts implemented by governments around the world at the beginning of the 21st century share several important common features. One is the focus on bringing about the achievement of new curriculum goals, such as lifelong learning ability, suited to the needs of an information society. Another is the recognition that the reform goals can only be achieved through pedagogical innovation which includes changes in pedagogical roles and the incorporation of appropriate use of ICT. It is thus to be expected that comparative studies of pedagogical innovation would become more important and necessary (Broadfoot 2000; Alexander 2001).

This chapter has reviewed a number of approaches used in the literature on comparative pedagogy and comparative pedagogical innovations. Most of the methods reviewed aimed to produce pedagogical characterisations. These methods differ in the focal unit of analysis, the scope and the purpose of the characterisation, the research paradigm adopted, and the extent to which the analyses attempt to link such characterisations to school and system level characterisations. While the comparison of pedagogical innovations may draw on research in the area of comparative pedagogy, this area of research has so far resulted in methodological innovations that have attempted to address two new

dimensions: comparison of the extent of pedagogical innovation, and the characterisation of pedagogical practice to highlight the kinds of change that have emerged during a period of flux. It is expected that more studies in this area will lead to more methodological advances, contributing to a better understanding of pedagogical innovations and the processes of change at theoretical and practical levels.

III: Conclusions

Scholarly Enquiry and the Field of Comparative Education

Mark BRAY

The preceding chapters in this book have noted that the field of comparative education is by nature interdisciplinary. This chapter elaborates on this theme, and examines ways in which the field relates to other domains of academic study.

A useful starting point is a 1989 book written by Tony Becher. It was published in second edition in 2001 under the co-authorship of Tony Becher and Paul Trowler, with the title *Academic Tribes and Territories: Intellectual Enquiry and the Culture of Disciplines*. Both editions lucidly analysed dimensions of the academic arena, with the second edition extending analysis and updating it to take account of several powerful influences on the size and shape of higher education. Although both editions were primarily concerned with the UK and the USA, they also had considerable relevance to other countries. The domain of educational studies was given only passing attention in the books, but patterns and trends in educational studies can be mapped against those in other domains fairly easily. This chapter is based more strongly on the second edition of the book than on the first, since the second edition is not only more recent but also more penetrating than the first. The chapter also draws on the works of many other scholars, and particularly the conceptual schema presented by Oliveira (1988).

Defining Tribes and Mapping Territories

The tribes to which Becher and Trowler referred are academic communities as defined in part by the members of those communities and in part by the institutions which employ and locate them in departments, centres or other units. The territories are the academic ideas on which they focus. This includes methodological approaches, subject matter and modes of discourse.

The subtitle of the book referred to the culture of disciplines. Cultures were defined (Becher & Trowler 2001, p. 23) as “sets of taken-for-granted values, attitudes and ways of behaving, which are articulated through and reinforced by recurrent practices among a group of people in a given context”. The primary focus of the book was on “practitioners in a dozen disciplines whose livelihood it is to work with ideas ... [which] lend themselves to sustained exploration, and which form the subject matter of the disciplines in question”.

This statement raises a question about the definition of disciplines. The concept of an academic discipline, Becher and Trowler pointed out (2001, p. 41), is not altogether straightforward:

There may be doubts, for example, whether statistics is now sufficiently separate from its parent discipline, mathematics, to constitute a discipline on its own. The answer will depend on the extent to which leading academic institutions recognize the hiving off in terms of their organizational structures (whether, that is, they number statistics among their fully-fledged departments), and also on the degree to which a freestanding international community has emerged, with its own professional associations and specialist journals.

In some of the typical instances of dispute, Becher and Trowler added, institutions may have decided to establish departments in particular fields but may find that the intellectual validity of those departments is under challenge from established academic opinion. The examples presented were black studies, viticulture and parapsychology. As the authors explained (p. 41):

Disciplines are thus in part identified by the existence of relevant departments; but it does not follow that every department represents a discipline. International currency is an important criterion, as is a general though not sharply defined set of notions of academic

credibility, intellectual substance, and appropriateness of subject matter.

Becher and Trowler nevertheless asserted that despite such apparent complications, “people with any interest and involvement in academic affairs seem to have little difficulty in understanding what a discipline is, or in taking a confident part in discussions about borderline or dubious cases”.

Within these parameters, various disciplinary groupings have different characteristics. Table 15.1 presents a classification into four categories based on a hard/soft and pure/applied matrix. The boundaries are of course not sharp, but the classification is nevertheless useful. The table places education in the soft-applied category, describing it as functional and utilitarian, and “concerned with enhancement of [semi-] professional practice”. This contrasts with the hard-pure sciences, for example, which are described as cumulative and atomistic, and concerned with universals, quantities and simplification.

Becher and Trowler also distinguished between emphases in disciplines by framing an analogy between urban and rural ways of life (p. 106):

[We] may liken specialisms which have a high people-to-problem ratio to urban areas, and those with a low one to rural areas. In the first, there is alongside a densely concentrated population a generally busy – occasionally frenetic – pace of life, a high level of collective activity, close competition for space and resources, and a rapid and heavily used information network. By and large, the rural scene, though it may offer frenetic and competitive moments, occasions for communal and involvement and a potential for spreading rumour and gossip like wildfire, displays the opposite characteristics.

On this categorisation, urban and rural specialisms differ not only in the communication patterns but also in the nature and scale of the problems on which their inhabitants are engaged, in the relationships between those inhabitants, and in the opportunities they have for attracting resources. Urban researchers typically select narrow areas of study, containing discrete and separable problems, while their rural counterparts commonly cover a broader stretch of intellectual territory in which the problems are not sharply demarcated or delineated. Competition in urban life can become intense, even cut-throat: an all-out race to find the solution

Table 15.1: Disciplinary Groupings and the Nature of Knowledge

Disciplinary groupings	Nature of knowledge
Pure sciences (e.g. physics): "hard-pure"	Cumulative; atomistic (crystalline/tree-like); concerned with universals, quantities, simplification; impersonal, value-free; clear criteria for knowledge verification and obsolescence; consensus over significant questions to address, now and in the future; results in discovery/explanation.
Humanities (e.g. history) and pure social sciences (e.g. anthropology): "soft-pure"	Reiterative; holistic (organic/river-like); concerned with particulars, qualities, complication; personal, value-laden; dispute over obsolescence; lack of consensus over significant questions to address; results in understanding/appreciation.
Technologies (e.g. mechanical engineering, clinical medicine): "hard-applied"	Purposive; pragmatic (know-how via hard knowledge); concerned with mastery of physical environment; applies heuristic approaches; uses both qualitative and quantitative approaches; criteria for judgement are purposive, functional; results in products/techniques.
Applied social science (e.g. education, law, social administration): "soft-applied"	Functional; utilitarian (know-how via soft knowledge); concerned with enhancement of [semi-] professional practice; uses case studies and case law to a large extent; results in protocols/procedures.

Source: Becher & Trowler (2001), p. 36.

to what is seen as a seminal problem. In rural life it makes more sense to adopt the principle of division of labour – there are plenty of topics, so there is no point in tackling one on which someone else is already engaged. Teamwork is another feature more common in urban than rural settings. Publications in urban fields are typically short and multi-authored, and have rapid turn-around times. In rural areas, authors commonly wait over a year, and sometimes considerably longer, for their articles to appear in print. Books are more important in rural disciplines than in urban ones.

While many of these features are durable, Becher and Trowler observed major changes in the late 1980s and the 1990s. These changes

brought what they called (2001, p. xiii) “major geomorphic shifts” in the landscape on which the territories lie. The most important changes were in the increasingly intrusive role of the state, demands for performativity, and an increasing need for academics to “chase the dollar”. As a result, academics made adaptations to their lifestyles, “sometimes reluctantly, occasionally enthusiastically and often unconsciously”. The demands of funding bodies have changed the nature of the products produced by academics, and Research Assessment Exercises and similar schemes have extended processes of accountability and heightened anxieties within the academic world. These changes have affected education, including comparative education, alongside other fields.

Education, and Comparative Education, in Relation to Other Domains of Enquiry

Although Table 15.1 does explicitly name education as inhabiting a disciplinary territory, its disciplinary basis is not undisputed. The field of education does have departments, degrees and specialist journals, but its intellectual substance tends to draw on other disciplines and rather rarely to assert distinctive characteristics which are unique to the study of education.

If it is doubtful whether the whole domain of education could be considered a discipline, it is even more doubtful whether comparative education could be considered one. A few people do describe comparative education as a discipline (e.g. Kerawalla 1995, p. 660; Sutherland 1997, p. 42; Chabbott 2003, p. 116), but most see it as a field which welcomes scholars who are equipped with tools and perspectives from other arenas and who choose to focus on educational issues in a comparative context. Such a view has been presented for example by Lê Thành Khôi (1986, p. 15), who described comparative education as “a field of study covering all the disciplines which serve to understand and explain education”.

Oliveira (1988) examined this matter in more detail. First, he noted (p. 174), most knowledge of a scientific level about education consists

of a heterogeneous collection of contributions coming from philosophy, psychology, sociology, economics, politics “of education”. Their authors, usually not personally involved in the education system, naturally bring to these studies the bias of their particular disciplines. The economist worries about the degree of real abilities

of the “human resources” produced by education, and tries to evaluate the cost of their acquisition; the sociologist wants to know whether education prepares people to adapt themselves to their social environment, or perhaps to foster change and revolution; the philosopher, from a wider perspective, inquires into the general meaning and the goals of education, what such goals are and should be in today’s world.

Oliveira noted that all these contributions of the plural “sciences of education” are valuable and even indispensable; but he suggested that they remain on the fringes of the specific features of the day-to-day processes of growth and development, the interpersonal relationships between educators and educated, and the corresponding frame of institutional arrangements. Oliveira then declared that the domain of education does have a unique disciplinary body of knowledge, and that it deserves a label to reflect that. Existing commonly used labels, he suggested, are inadequate. Thus Pedagogy is misleading because it does not refer to a knowledge but to an action – that of “leading” children, first to their teacher and later to learning as such. Oliveira also rejected as inadequate the terms Didactics, Sciences of Education (in the plural), and Science of Education (in the singular); and he declared (p. 176) that “simply to say “education” is a semantic nonsense: education is an activity not a knowledge – just as society is not sociology, language is not linguistics, and animals are not zoology”.

To overcome this difficulty, Oliveira drew on the proposals previously made by Christensen (1984) and Steiner Maccia (1964), and asserted that there was no better word than “educology”. The word, he declared, “clearly designates all educational knowledge, and nothing but that knowledge, whether scientific or pragmatic, acquired through any discipline”. He added that the word might initially look strange, or even pedantic, just as “sociology” – another Graeco-Latin hybrid – did in its time; but, he claimed, “it brings to educational science such clarity and precision that it should be generally adopted”.

Oliveira recognised that more important than the name was the basic theoretical structure of the contents of educology, that is, of the whole field of educational knowledge into which every new piece of research could find its place and be tested for congruence with already existing knowledge. Oliveira proposed such delineation with the aid of a diagram which separated the human sciences on the one hand from the sciences

“of education” on the other hand, and located educology between them. In turn, these were linked to object-realities as shown in Figure 15.1.

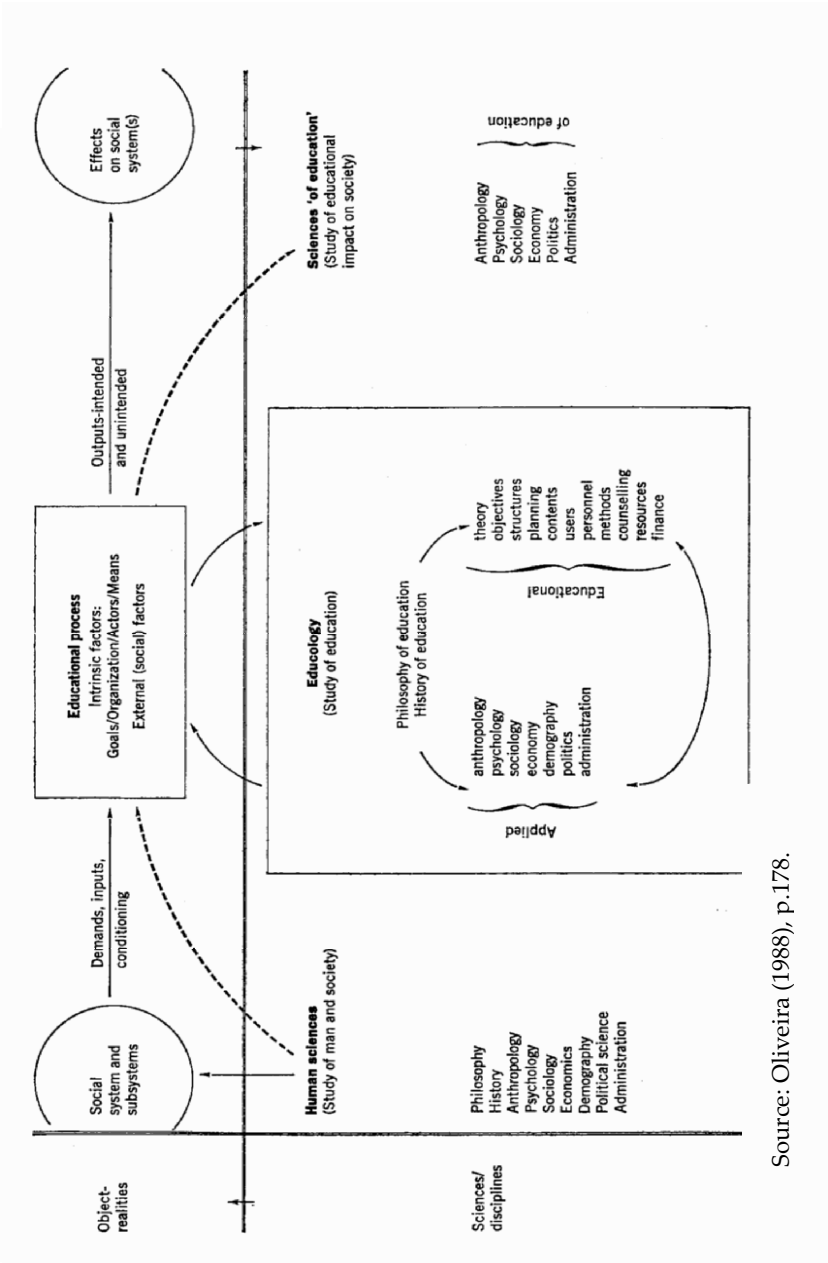
The question then for the present chapter is where comparative education fits into this schema, for it is notably absent from Figure 15.1. To answer this question, Oliveira began by noting (p. 179) that at the level of common or pre-scientific knowledge, comparison between objects, and therefore the establishment of mental relationships among them, lies at the very origin of concepts and ideas. A refined form of the same mental processes is used at the scientific level for establishing definitions, measuring phenomena or building models. Thus each component in Figure 15.1 is based on comparison, and the distinctions between the sciences are themselves the results of comparison (between their objects, viewpoints, methods, etc.).

But if comparison as a method is universal, Oliveira continued (p. 180), a “comparative” science only deserves this name when it carries comparison to a higher level of abstraction – becoming in effect a “comparison of comparisons”. Thus, particularly in social disciplines, “the adjective “comparative” can only be used when the comparison is applied to previously elaborated sets of theoretical statements referring to realities of a similar kind pertaining to discrete social groups”. In many comparative fields, including comparative education, one common such social group is a nation or a country; but any case, being “discrete” these units can always be approached as “systems”. Since each of those previous sets of knowledge is in itself partially the result of comparison, comparative fields of enquiry in effect present a sort of second-degree use of the comparative method.

In turn, this explains why comparative education was not included in Figure 15.1: it would have required a third dimension to the diagram, since comparative education represents in effect a higher epistemological level. As explained by Oliveira (p. 181):

Its approach to truth covers all the particular objects of the disciplines mentioned in the central section of the diagram. But strictly speaking, it does not tackle any of them directly, for it is not interested in any single educational situation, but in two or more at the same time. In order to manage several real objects simultaneously, each of these situations must have been rendered manageable, that is, comparable, through a first level of abstraction.

Figure 15.1: Oliveira's System-Based Classification of Education-Related Disciplines



Source: Oliveira (1988), p.178.

Thus, commencing with a plurality of these abstract models and using its own theoretical and methodological tools, comparative education produces its own second-degree data and reaches its own conclusions. Such conclusions may be of many kinds, including laws or quasi-laws, provisional theories, confirmations or refutations of previous theories, new hypotheses for future research and so on. As Oliveira concluded (p. 181), these products, now of a truly comparative nature, “may of course be used for action on any of the systems originally studied; but above all they enlarge and eventually modify the data and the conclusions of the specific studies, and provide feedback to individual disciplines”.

Methodology and Focus in Comparative Education

As explained above, the disciplines which have had the greatest impact on comparative education are clustered in the social sciences. To some extent, therefore, 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 postmodernism in the 1980s and 1990s (Psacharopoulos 1990; Epstein 1994; Crossley 2000; Paulston 2000). However, comparative education scholars have tended to use a fairly limited set of tools from the social sciences. This is partly for the reasons explained above, i.e. that much (or even most) comparative education is in a sense a second-level comparison which relies on units which have already been identified through comparison. Books and journal articles in the field of comparative education display many commentaries based on literature reviews, but relatively few studies based on survey research, and almost no studies based on experimental methods.

In order to gain a deeper understanding of this phenomenon, Rust et al. (1999) analysed articles in three major English-language journals in the field, namely the *Comparative Education Review* published in the USA, and the *Comparative Education* and the *International Journal of Educational Development* published in the UK. Reviewing articles in the 1960s, they found (p. 100) that 48.5 per cent were mainly based on literature review and 15.2 per cent were historical studies. For the 1980s and 1990s, Rust et al. found a marked drop in the two categories – to 25.7 per cent mainly based on literature review, and 5.0 per cent 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.

Rust et al. also scrutinised the qualitative/quantitative biases of the articles. Their survey of 427 articles published in 1985, 1987, 1989, 1991, 1993 and 1995 found that 71.2 per cent were based on qualitative methods, 17.3 per cent were based on quantitative methods, 10.8 per cent were based on a combination of qualitative and quantitative and 0.3 per cent were based on other strategies. Commenting on this, the authors suggested (1999, p. 106) that scholars in the field of comparative education

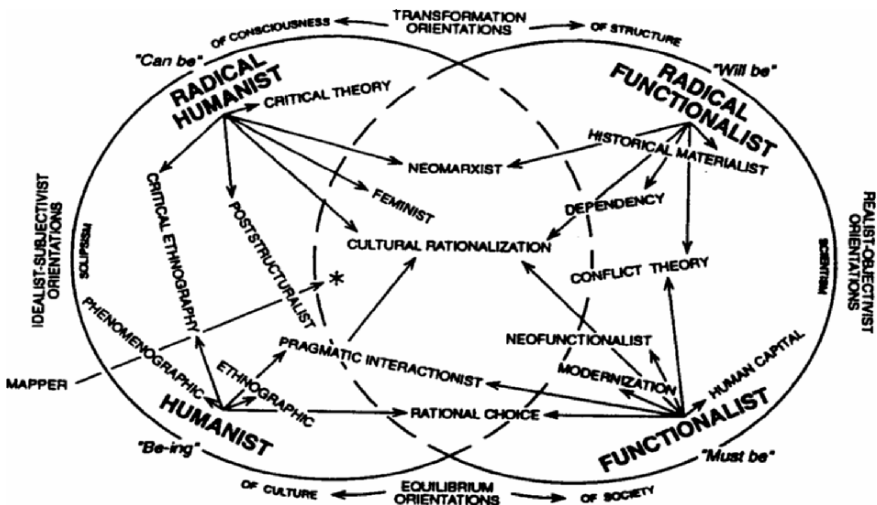
tend to rely on similar philosophical assumptions. Concerning the nature of reality, comparative educators would tend to see reality as somewhat subjective and multiple, rather than objective and singular. Epistemologically, comparative educators would tend to interact with that being researched rather than acting independently and in a detached manner from the content. Axiologically, comparative educators would tend not to see research as value free and unbiased; rather, they would accept the notion that their research is value laden and includes the biases of the researcher.

However, the nature of the themes and the methodological approaches has 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 USA and UK. Cowen (2000b, p. 333) has highlighted the coexistence 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.

Beginning with the first of these two groups, it is useful to note the maps of the field produced by Paulston (1997, 1999, 2000). Figure 15.2 reproduces one of these maps, showing paradigms and 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 field 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. Epstein (1992, p. 23) is among scholars who have pointed out that certain rival epistemological orientations in the field of comparative education are fundamentally incompatible.

Figure 15.2: A Macro Mapping of Paradigms and Theories in Comparative and International Education



Source: Paulston (1997), p. 142.

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 common languages. 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 & Eckstein 1998; Gu 2001). Among the major concerns of Noah and Eckstein, who were based in the USA 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. Especially 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.

Everywhere, however, one domain in which the fundamentals of the field of comparative education could be challenged concerned the extent to which the writings in the field were actually comparative. A longstanding complaint by many scholars in the field (e.g. Eliou 1997; Cummings 1999; Little 2000) has been that many articles even in journals which explicitly include the word "comparative" in their titles, such as *Comparative Education* and *Comparative Education Review*, contain large numbers of single-country studies in which the nature and extent of comparison is open to question.

In conferences devoted to the field, in which the screening processes are usually much more lax than for publication in journals, the conceptual looseness is even more pronounced. Thus, as noted by Oliveira (1988, pp. 166–167), for example:

The list of papers presented to the last two World Congresses of Comparative Education Societies (Paris, 1984; Rio de Janeiro, 1987: over 350 papers in all) is ... very revealing. Only a minority (19 per cent in Paris, 26 per cent in Rio) are genuinely comparative studies, dealing either with worldwide educational problems or with specific issues studies in two or more countries. Another 13–17 per cent attach themselves to problems of theory, epistemology or methodology. On the other hand, about half of the papers (45 per cent in Rio) are case-studies, which do no more than describe and sometimes analyse a system, a historical process, an innovation or a special national situation. Not only is there no comparison here, but they make no attempt to draw any conclusions or at least to suggest some hypothesis which could be useful in other contexts. Then, a

sizeable number (7 per cent in Rio) propose some reflections on education or describe some innovation in a general way, without reference to any concrete situation.

Part of the reason for this looseness arises from alliances between the field of comparative education and the field of international education, which Wilson (1994) has described as Siamese twins. The term international education means different things to different people. For example, some individuals describe it as the process of training individuals to see themselves as international in orientation (e.g. Gellar 2002); while others have used the term international education to mean "the various types of educational and cultural relations among nations" (Scanlon & Shields 1968, p. x). The distinction drawn by Rust (2002a, p. iii) is that comparative education covers more academic, analytic and scientific aspects of the field, while international education is related to cooperation, understanding, and exchange elements. In the USA, the Comparative Education Society (CES), which had been founded in 1956, was renamed the Comparative & International Education Society (CIES) in 1968 (Sherman Swing 2006), though the official journal of that society retained its name as the *Comparative Education Review*. Other professional societies in which the twin fields are placed together include the Comparative and International Education Society of Canada (CIESC), the British Association for International and Comparative Education (BAICE), and the Australian & New Zealand Comparative and International Education Society (ANZCIES).

The ambiguities reflected in these names contribute to the ambiguities in the field. The editors of the *CIES* journal find it difficult to reject articles which could be described as part of international education rather than comparative education, since the former is as much a part of the name of the CIES as is the latter, even though the title of the journal reflects only the comparative side of the society's name. A similar remark applies to the official *BAICE* journal, which is entitled *Compare: A Journal of Comparative Education*. The *CIESC* journal has the opposite bias, because it is entitled *Canadian and International Education* and thus does not mention comparison in its title. ANZCIES does not have an official journal, so does not face this particular problem.

The World Council of Comparative Education Societies (WCCES), it must be admitted, does not contain the word International in its title, and in that sense is less constrained by the ambiguities that confront the four above-named national societies. However, these four bodies are among

the 33 constituent societies of the WCCES, and the world body is thus also influenced by the ambiguities – especially because the US-based CIES is the largest and most active of the WCCES constituent societies (Bray 2003a). Thus, when World Congresses of Comparative Education Societies are organised on behalf of the WCCES, loose definitions of the field are always used. In the specific cases of the 1984 Paris Congress and the 1987 Rio de Janeiro Congress mentioned above, the organisers, as noted by Oliveira (1988, p. 168), did not feel entitled to refuse any of the papers to which Oliveira referred since there seem to be no accepted criteria to define what is and what is not comparative education.

Geomorphic Shifts

As noted above, Becher and Trowler (2001) observed major changes in the domain of higher education during the late 1980s and 1990s, particularly in the UK and the USA. 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 field of comparative 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, many continuities are evident.

In the UK and the USA, one way in which the state has affected the field of 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 field of 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 the UK and the US 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 in the field. This point may be illustrated by contrasting the visibility in the comparative 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 in journals of the UK and US comparative 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 UK and US governments operated few projects in China. By the 1990s, however, this picture had changed dramatically. Many Chinese scholars were studying in UK and US 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 on the one hand had access to literature in English and on the other hand were able to communicate with outsiders in that language.

Another geomorphic shift of great significance to the field of comparative education 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 education contributed to the expansion of

existing journals and to the launching of new ones. Expansion may be illustrated by the following facts:

- In 1992, the Netherlands-published *International Review of Education* increased from four to six issues a year.
- In 1993 the UK journal *Compare: A Journal of Comparative Education* increased from two to three issues a year, and in 2003 it further expanded to four issues a year.
- In 1998, the UK journal *International Journal of Educational Development* increased from four to six issues a year.
- In 2002, the Chinese journal *Comparative Education Review* increased from 6 to 12 issues a year.

New journals appearing during the decade and a half from 1990 included:

- *Educazione Comparata*, an Italian journal which commenced publication in 1990
- The German journal, *Tertium Comparationis: Journal für International und Interkulturell Vergleichende Erziehungswissenschaft*, which was launched in 1995
- The *Journal of Comparative Education*, a Chinese-language publication which began as a newsletter published in Taiwan in 1982 and which in 1997 evolved into a full journal
- The *Revista Española de Educación Comparada*, which was launched in Spain in 1995
- *Current Issues in Comparative Education*, which commenced publication in the USA in 1998
- *Politiques d'Éducation et de Formation: Analyses et Comparaisons Internationales*, which was launched in France in 2001
- *In Focus: Journal of Comparative, International and Intercultural Education*, which was launched in the USA in 2002
- *Comparative and International Education Review*, which was launched in Greece in 2003
- *Research in Comparative and International Education*, which was launched in the UK in 2006

In addition, of course, many comparative education scholars published in journals which were not specifically dedicated to the field. They also published books and contributed chapters to edited works. The expansion in publication outlets partly reflected general growth in higher education, and thus in the number of academics working in universities, but also the

overall climate of increased pressure on academics to conduct research and publish their findings.

The third element in the geomorphic shift identified by Becher and Trowler (2001) was the increased pressure to “chase the dollar”. This pressure was chiefly caused by a general tendency of governments to reduce the extent to which they funded higher education institutions, and was coupled with higher education expansion which 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, where higher education for overseas students became a major industry (Welch 2002; Ninnes & 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 forming a further major geomorphic shift, has been the advent and impact of globalisation. Held et al. (1999) have pointed out that globalisation is in many respects an old concept with deep roots, but the scale, nature and impact of globalisation during the 1990s and initial years of the present century has certainly been new. 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 large numbers of 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 & Watson 2003).

Finally, geomorphic shifts have been brought by technology. One component of this 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. Among the new journals listed above, *Current Issues in Comparative Education*, *In Focus: Journal of Comparative, International and Intercultural Education*, and *Research in Comparative and International Education* are solely Internet-based; and

among the traditional journals, several 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, 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.

Nevertheless, despite these geomorphic shifts, some characteristics of the field of comparative education remained as pronounced in the 1990s and initial years of the present century as they had been in the 1980s and before. Thus, referring back to Oliveira's comments about the lack of disciplinary coherence in the offerings at the Paris (1984) and Rio de Janeiro (1987) World Congresses of Comparative Education Societies, it is unlikely that analysis of offerings at the subsequent World Congresses in Montreal (1989), Prague (1992), Sydney (1996), Cape Town (1998), Chungbuk, South Korea (2001) and Havana (2004) would have done much to change his perspective. Despite attempts in some quarters to circumscribe the field of comparative education more tightly, it remains very loosely defined. It does so, moreover, in all regions of the world. The journals written in Chinese, German, English, French, Japanese, Korean and Spanish may differ from each other in their methodological emphases and in the themes chosen by their contributors, but are broadly comparable in their eclecticism and in the fact that they are methodologically much less rigorous than most purists in the field of comparative education would desire.

Conclusions

The extent to which education would be considered a discipline could be disputed. Becher and Trowler (2001) did consider it a discipline, albeit in the soft and applied categories. Other observers would consider it to be a field of study which welcomes scholars who have been trained in other domains. The field has developed significantly over the decades and centuries but, as noted by Oliveira (1988, p. 174) "an educator is not easily accepted as a member of the scientific community, unless he or she has had formal training in some other social discipline". Nevertheless, Oliveira

made a case for asserting the disciplinary identity of education more strongly, and proposed the more widespread use of the label "educology".

If education cannot easily be described as a discipline, the field of comparative education is even further from that status. The academic tribe which operates under the label of comparative education is a fairly loose grouping of individuals. It is related to another tribe which operates under the label of international education and which to some extent inhabits the same territory. There has been considerable intermarriage between members of these tribes, leading to corresponding mixes in the characteristics of offspring (Wilson 1994, p. 450).

One merit of an environment in which scholars from a range of disciplines are welcome to converge is that cross-fertilisation between approaches can be permitted and encouraged. This does occur to some extent in comparative education: economists, sociologists, demographers and political scientists meet together and illuminate each other through their varying perspectives on education systems and processes in different countries and cultures. However, the extent of cross-fertilisation is in many respects disappointing. As in multidisciplinary universities where the Faculties of Law, Science, Architecture, Dentistry and Education do not usually have much intellectual interflow, and instead tend to inhabit separate intellectual territories within the same geographic space, the field of comparative education is also compartmentalised. Positivists and neo-Marxists do occasionally clash, and even more occasionally do learn from each other, but in general they ignore each other. Similar remarks may be made about psychologists and anthropologists, and, moving to area specialisms, Africanists and Sinologists, for example.

Returning to Becher and Trowler's distinction between "urban" and "rural" fields, comparative education is on the whole rural in nature. Researchers typically cover broad stretches of intellectual territory in which the problems are not sharply demarcated or delineated, and the field does not have fierce competition resembling that in microchip technology or research on HIV/AIDS, for example. Team work in comparative education may be considered useful, but even when the teams exist they tend to be loosely organised. Instead it is commonly considered more sensible to opt for division of labour, on the grounds that plenty of topics await exploration and that there is little point in tackling ones on which others are intensively engaged. As in other rural fields of study, comparative education tends to have quite lengthy publication lag times, and book-length

works are an important form of scholarly output in addition to journal articles.

Like other domains of enquiry, however, the territory of comparative education has undergone some geomorphic shifts in recent years. These shifts partly arise from the increasing intrusiveness of the state in higher education, from demands for performativity, and from financial pressures. Other factors include technological advances, and geopolitical changes. These geomorphic shifts have altered the ways in which the various sub-tribes within the field of comparative education have defined themselves and have related both to each other and to academics in other fields. Certain ways of thinking, such as those associated with Cold War politics, have gone out of fashion, while others, including those related to globalisation, have come into fashion.

However, the field continues to tolerate considerable descriptive work of a low intellectual calibre. This is especially evident in conferences devoted to comparative education, where screening processes are even less rigorous than for publications. Thus, in addition to the extensive disciplinarity and interdisciplinarity is a considerable amount of non-disciplinarity. Alternatively, slightly adjusting the last of these words, the field of comparative education contains considerable undisciplined thinking, in which vague ideas and poorly thought-out methods of analysis are tolerated alongside more rigorous work. Some conference organisers and publishers would defend this situation on the grounds that undisciplined scholars, particularly if they are neophytes in the field, may at least have potential to inform their listeners and to become more rigorous in their own work. Other participants and observers would consider this eclecticism and lack of discipline to be detrimental to the field and to the advance of intellectual enquiry.

Among Oliveira's (1988 p. 175) pertinent observations was:

In principle ... only the educator is in a position to develop the science of education (as sociology is developed by sociologists, economics by economists or demography by demographers) with the help of, but not subservient to, other social scientists. But on the other hand, educators are not usually trained scientists, and anyway the time-consuming requirements of their profession would not leave them leisure to elaborate scientifically the data they gather in their work.

This remark presents a strong rationale for thinking not only within but also across disciplines. This process itself requires analysis of the nature of disciplines, and of the factors which contribute to the development of those disciplines.

Note: This chapter is a revised version of an article published in *Comparative and International Education Review* (Bray 2004b). Permission from the editors of that journal is gratefully acknowledged.

Different Models, Different Emphases Different Insights

Mark BRAY, Bob ADAMSON & Mark MASON

This final chapter pulls together some themes from earlier chapters, and in a sense makes a comparison of comparisons. The earlier chapters have addressed a range of foci within a variety of paradigms. Using insights from the book, this final chapter begins with a discussion of models for comparative education research. It then makes some remarks about emphases, before concluding with comments about the insights than can be gained from comparative approaches and methods in educational research.

Models for Comparative Education Research

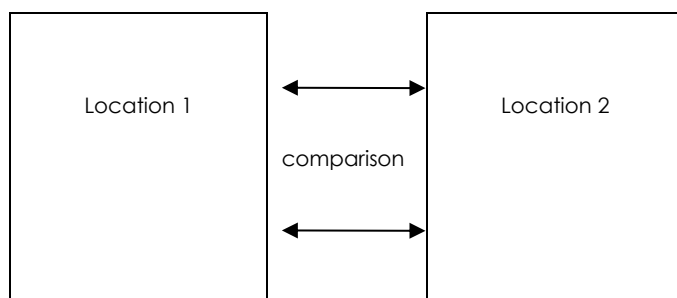
This book has shown that many models exist for comparative study of education. They cannot all be listed here, but some examples from the previous chapters deserve highlighting and elaboration. This section begins by remarking on the number of parallel units for comparison. It then looks again at the cube designed by Bray and Thomas noted in the Introduction, before turning to relationships with epistemological issues.

The Number of Units for Comparison

Manzon's chapter on comparing places commenced with the classic model presented by Bereday (1964) for comparison of education in two countries. The model has been widely cited and appreciated. Because it focuses on only two countries, the model permits considerable depth of analysis.

Taking an example from East Asia, within the present volume several chapters have referred to a book which in many respects echoes the Bereday model. The book focused on a pair of Special Administrative Regions (SARs) within a single country rather than on a pair of countries; but the SARs operated with strong autonomy in many domains including education, and in this respect were arguably similar to countries. The book, edited by Bray and Koo (2004), focused on Hong Kong and Macao. It contained 15 chapters focusing on sub-sectors of education (including preschool education; primary and secondary schooling; and teacher education), political, economic and social issues (including church, state and education; higher education and the labour force; and language and education); curriculum policies and processes (including curriculum reform; and civic and political education); and a concluding section (with chapters on methodology, and on continuity and change in education). A book with 323 pages focusing on two small places is able to cover its subject in considerable depth. Figure 16.1 is a representation of such a “thick” two-location study.

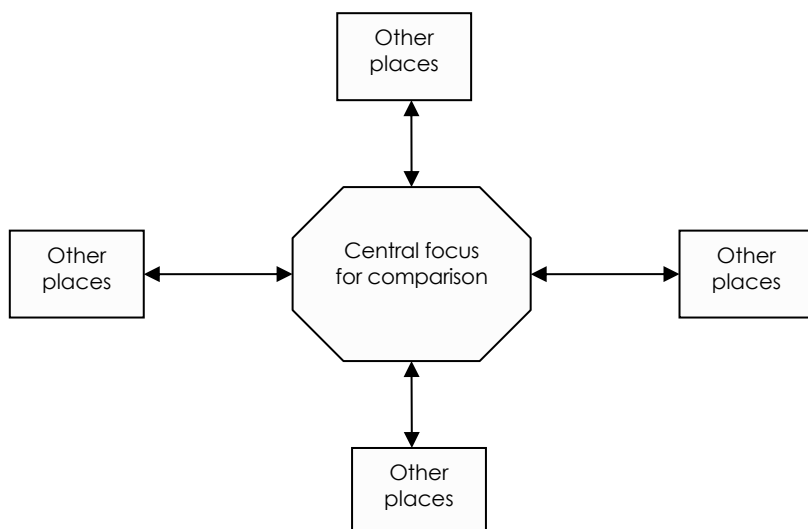
Figure 16.1: Diagrammatic Representation of a Two-Location Comparative Study



An alternative model puts education in one location at the centre of analysis and then makes comparisons as appropriate with other locations. Taking another example which concerns Hong Kong, a special issue of the journal *Comparative Education* illustrates this model. Entitled *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty* (Bray & Lee 1997), the work focused on Hong Kong's 1997 transition at the close of the colonial era, and contained comparisons with transitions of other former colonies including Fiji, Nigeria, Rhodesia and Singapore. Data on

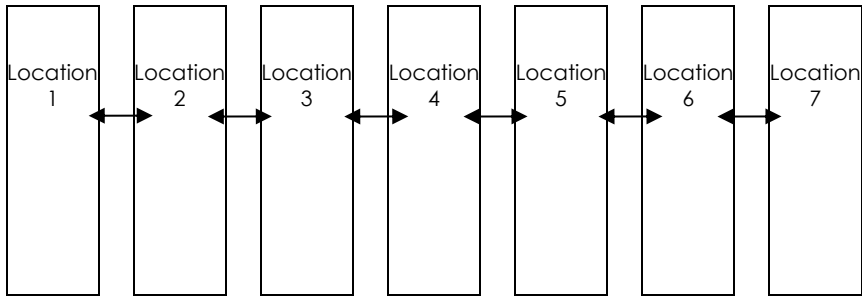
the territory at the focus of discussion were detailed, while the data on other places were thin. Figure 16.2 is a representation of a comparative study of this type.

Figure 16.2: Diagrammatic Representation of a Comparative Study with a Single Location in the Centre



A third variation resembles the Hong Kong and Macao comparison but has more locations. An example is a book entitled *Education and Development in East Asia* (Morris & Sweeting 1995), which has separate chapters on Hong Kong, Macao, Malaysia, the People's Republic of China, Singapore, South Korea and Taiwan. Although these states varied widely in size of population, educational provision and economic strength, separate chapters of roughly equal length were devoted to each. A comparative study designed in this way could not achieve the depth of the book which focused only on Hong Kong and Macao, but achieved greater breadth and thus a wider vision. Figure 16.3 is a simplified diagrammatic representation of this type of study (only showing arrows between pairs of locations, though of course many other arrows could be shown to indicate multiple comparisons within the group).

Figure 16.3: Diagrammatic Representation of a Seven-Location Comparative Study

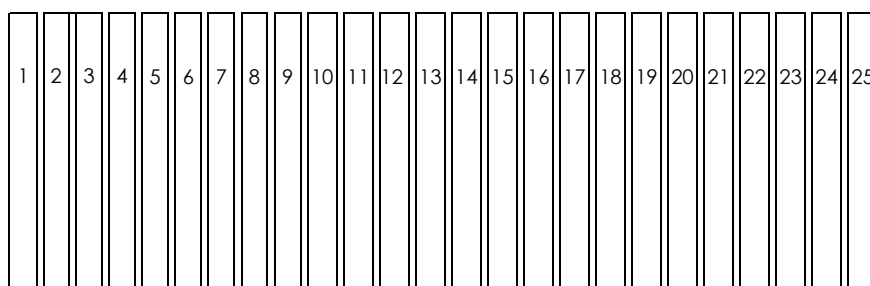


Continuing along the scale would be a multi-location study, such as the Trends in International Mathematics and Science Study (TIMSS). This study evolved from the predecessor TIMSS (*Third* International Mathematics and Science Study) mentioned in Chapter 9. The 2003 TIMSS report focused on Grade 4 mathematics achievement in 25 countries or systems, and on Grade 8 mathematics achievement in 46 countries or systems (Mullis et al. 2005). Figure 16.4 is a diagrammatic representation of the Grade 4 study (with arrows omitted), and begins to resemble a forest rather than a group of trees. This impression would be even stronger in a diagram of the 46 countries and systems in the Grade 8 study.

With so many units for analysis, the data on individual countries and systems in the 2003 TIMSS study are inevitably shallow. However, the large number of cases may have methodological advantages. The TIMSS studies were conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA), which, in addition to the discussion in Chapter 9, has been mentioned in several chapters of this book. Thus, Fairbrother in Chapter 2 highlights the IEA studies of literacy achievement; Lee in Chapter 8 focuses on the IEA studies of civic education; and Law in Chapter 16 discusses the IEA's Second Information Technology in Education Study. The remarks by Elley (1994, 1999) about the advantages and disadvantages of large-scale, international quantitative studies remain valid. He observed the systematic body of evidence provided through standardised questionnaires in different countries and, with specific reference to literacy, noted that the database permitted directly comparable judgements about different countries. The collection of data from multiple settings increased the

number of variables available for analysis, and provided benchmarks for policy makers. The weaknesses of the studies included the difficulty of ensuring comparable samples. Challenges also came from differences in traditions of testing among participating countries, different structures and sequencing of school curricula, and the close relationship between literacy and cultural context. Related advantages and challenges have been evident in large-scale surveys conducted under the framework of the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) and the Programme for International Student Assessment (PISA), both of which were mentioned in Chapter 9.

Figure 16.4: Diagrammatic Representation of a 25-Location Comparative Study



Further questions for researchers when deciding on the number of units for comparison relate to the capacity to undertake the work and access to information. Large international surveys are commonly undertaken by teams rather than by individual scholars, since such surveys require considerable labour and commonly demand knowledge of many cultures and languages. Individual researchers can of course undertake valuable secondary analysis of the data generated by large teams (see, e.g. Robitaille & Beaton 2002); but original research cannot usually be undertaken by individual researchers when it demands data collection in many countries. Thus, the choice of model for comparative study may be shaped by the availability of human, financial and other resources as well as by considerations of breadth and depth.

Revisiting the Bray and Thomas Cube

The multilevel model devised by Bray and Thomas in the mid-1990s noted that much research in comparative education focused primarily on cross-national comparisons, and pointed out the benefits of also considering intranational comparisons. The model has been widely cited, and has helped to develop the field in new directions. It is thus worth evaluating over a decade later, to see what refinements and extensions can usefully be made.

At the core of the model is the cube reproduced as Figure 0.1 in the Introduction. The face of the cube presented a set of geographical/location levels: from world regions or continents through countries, provinces, districts and schools to classrooms and individuals. A second axis located the dimensions of comparison in terms of nonlocational demographic groups, such as ethnicity, age, religion and gender; and the third axis incorporated substantive educational issues such as curriculum, teaching methods, finance, management structures, political change and the labour market.

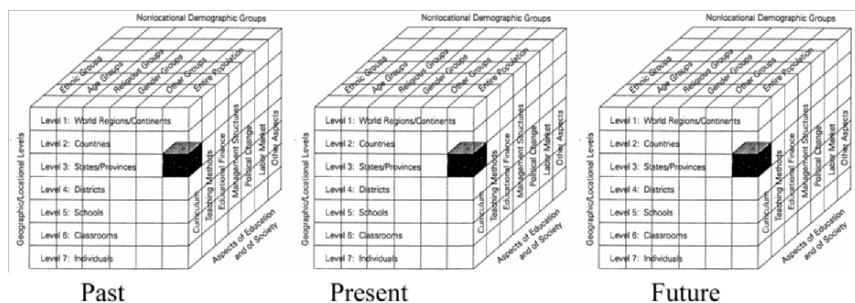
Within this book, Manzon's chapter explicitly addresses the front face of the cube. Manzon notes that the geographic classification could be expanded to include clusters of countries based on colonial history, economic alliances and religion. With respect to colonial history, for example, territories in sub-Saharan Africa may be categorised as former British, French or Portuguese colonies; and regional economic blocks could include the European Union (EU) and members of the North American Free Trade Agreement (NAFTA). Religious groupings could include countries dominated by Islam compared with countries dominated by Christianity, Buddhism and/or other beliefs. Geographic entities on the cube could also include cities and/or villages. These aspects could easily be included in the cube through addition of categories on the front face.

Presentation on the cube of units which do not occupy contiguous geographic space might seem more problematic; but even this can be conceptualised within the cube. Thus, in line with Chapter 5 and taking the system rather than the country as the unit of analysis, Flemish-speaking schools in Belgium could be compared with French-speaking schools because those individual schools occupy physical space and the systems can be conceived geographically as the sum of the physical spaces occupied by the schools even if the spaces are not contiguous. A similar remark would apply to education systems serving different cultures, as discussed in Chapter 7. Perhaps more challenging would be

conceptualisation of education which is conducted over the internet and which therefore exists in cyber space rather than physical space; but even in those lessons the learners and the teachers occupy physical spaces, which means that the geographic territory could be taken as the aggregate of these physical spaces.

Thus, perhaps the only chapter in Part II of this book which represents a unit of analysis which cannot be covered in the cube is Chapter 6 on comparing times. Comparisons across time were in fact considered by Bray and Thomas (1995, p. 474), though in order to permit focus on the main thrusts of the article were relegated to a footnote. An early draft of the article included a diagram showing the cube three times, for past, present and future, as in Figure 16.5. In this case, the shaded box represents a comparison of curriculum for a single state/province at three points in time. Of course the labels could easily be changed, e.g. to refer to three points in the past.

Figure 16.5: Comparisons Across Time Using the Bray and Thomas Cube



The categories listed on the cube could be broken down into subcategories for comparison. For example, the study of Hong Kong's education system outlined in Chapter 5 focuses on the state and private providers of education, the different media of instruction and the diverse range of curricula. However, a decision to map these subcategories on the cube in advance would run the risk of prescription. Certainly researchers may sometimes benefit from fixing the points for comparison at the outset – for instance, if the study is an evaluative comparison designed to address specific issues. However, researchers using a hermeneutic or an

inductive approach would probably prefer the subcategories to emerge from the data.

Nevertheless, while these remarks seem to leave the cube intact and to demonstrate that it is conceptually robust, one important point in the earlier chapters of the present book concerns the nature of the categories. In a number of cases, remarks have been made about the “slipperiness” of some units of comparison when a clear definition is attempted. Curriculum, for example, can be viewed as embracing the whole learning experience or simply a body of knowledge to be studied. This problem of sharp definition is most clearly explained by Manzon in Chapter 4. She suggests that the levels on the front face of the cube, and by implication perhaps also the categories on the other two faces, should in many circumstances be seen as having blurred and perhaps permeable boundaries. In Manzon’s words:

The different levels of geographic units, while distinct are not disjointed, hermetically sealed spaces. Rather, they are like ecological environments, conceived as a set of nested structures, each inside the next. ... The higher and lower geographic levels mutually influence and shape each other as in a “dialectic of the global and the local”. ... A recognition and understanding of the mutual relationships subsisting across each of the spatial levels is indispensable for a holistic comprehension of the essence of educational phenomena.

With this in mind, perhaps even better than blurred boundaries, would be the ones that are in continuous dynamic flux.

Epistemological Approaches

Of course consideration of models goes far beyond mere counting of units for comparison and identification of geographic levels on the face of a cube. Models in a broader sense include more fundamental epistemological approaches. As observed in Chapter 15, the field of comparative education embraces a wide range of paradigms, some of which were mapped by Paulston as reproduced in Figure 15.2. Some researchers who favour particular paradigms barely communicate with researchers who favour other paradigms. Instead they live in separate academic worlds dominated by different conceptual models which are commonly incompatible (Epstein 1992, p. 23).

As such, continuing the remarks about the Bray and Thomas cube, it may be noted that the cube is in itself more a descriptive model for

classifying (existing) comparative studies than an instrument for recommending researchers to investigate particular types of comparison. The model does encourage researchers to consider multilevel analyses, but even that is not always essential. Rather, good comparative education researchers will necessarily consider factors along each of the axes before they isolate the variables pertinent to their hypotheses. In order to do this, researchers need to relate methods to the appropriateness of the epistemological approach selected, i.e. to ask whether the epistemological framework and its methodological correlate are likely to generate the desired type of investigation. This in turn requires researchers to consider the purposes and contexts of their studies. Such considerations relate to the normative questions that are always associated with research in the social sciences. The questions arise from the discourses that inform specific studies, and thus the values that inform or drive those studies.

Researchers will stand more chance of identifying sources of variance if they design their studies after they have formulated hypotheses about what might cause the variance. It may seem a trivial example, but the designers of the IEA study of reading literacy considered by Elley (1994, 1999) and noted above would be unlikely to seek variance in levels of ability by comparing the eye colours of pupils. This is because they would probably have a theory, before they even began the study, about what factors might or might not influence reading ability. However, they could well have found that shoe size, or the number of light bulbs in a home were both quite strongly correlated with reading ability. This is because each of these variables may be a proxy for other more pertinent factors, like age, and therefore level of individual development (in the case of shoe size), or socioeconomic status (in the case of light bulbs). The point is that apparently irrelevant or trivial factors might or might not be relevant, and that researchers cannot begin their research designs until they have formulated hypotheses about the relevance or otherwise of these factors.

A further dimension concerns the ways in which researchers themselves interact with and interpret their data. Social sciences refer to perspectives which are *emic* (culture-bound, based on intrinsic, indigenous definition and distinction of values) or *etic* (cross-cultural, based on extrinsic, outsider definition and distinction of values). At first glance, it would appear that the *etic* perspective has more to offer comparative studies. The Bereday model implied that researchers could and should remain detached and objective. Yet as noted by Arthur (2004, p. 1), this

could only be achieved by researchers who investigate countries in which they have not had any previous experience – and this would commonly be considered disadvantageous in the field of comparative education since so much depends on contextual understanding. Arthur observed (p. 4) that in practice most comparative research requires construction of understanding and building of bridges (see also Crossley 2000, 2006), and that this in turn requires interaction and personalisation of research.

From these remarks it will be evident that the number of cases considered in parallel, or the number of levels considered in a cube, cannot themselves provide appropriate hypotheses. Researchers should therefore set out epistemological issues alongside whatever model they select for their studies, so that method and approach inform each other. Researchers need theoretically informed perspectives both on what they are looking at and on what they are looking for, and they need hypotheses about the axes along which various elements for investigation might be differentially distributed. These hypotheses then lead to choices of the appropriate domains to assess and, if appropriate, measure.

Emphases in Comparative Education Research

The above discussion leads to further consideration of emphases within the broad field of comparative education. The Introduction to this book noted that different decades have brought evolution and shifts. Kazamias and Schwartz (1977, p. 151) suggested that despite uncertainties during the mid-1950s when the foundations were laid for the promotion of comparative education as a respected field of studies, it was possible to identify both authoritative spokesmen and texts which defined the contours and subject matter of the field. By the mid-1970s, Kazamias and Schwartz felt, the coherence had been lost: there was “no internally consistent body of knowledge, no set of principles or canons or research that are generally agreed upon by people who associate themselves with the field”. A similar view was presented a decade later by Altbach and Kelly (1986, p. 1).

However, many commentators have subsequently presented much more optimistic appraisals, commonly viewing diversity as an asset as much as a weakness (see, e.g. Foster 1992, p. 198; Kubow & Fossum 2003, pp. 19–22). Ninnes and Mehta (2004, p. 1) viewed positively the eclecticism which “incorporates a range of theories and methods from the social sciences and intersects a range of subfields, including sociology of education,

educational planning, anthropology of education, economics of education and education and development". In related vein, Crossley and Jarvis (2000, p. 261) remarked both on "the exponential growth and widening of interest in international comparative research", and on "increased recognition of the cultural dimension of education".

Chapter 15 in this book considered a survey by Rust et al. (1999) of articles in three major English-language journals, namely the *Comparative Education Review* (published in the USA), *Comparative Education* (published in the UK) and the *International Journal of Educational Development* (also published in the UK). Rust et al. found that a large proportion of articles were based on literature review, though during the 1980s and 1990s more projects were presented and more articles were based on participant observation, interviews and questionnaires. In this respect, the field as reflected in these journals had increased its use of some standard social science instruments. The survey also noted a strong emphasis on qualitative methods. In line with the remarks by Arthur (2004) noted above, Rust et al. observed (p. 106) that "comparative educators would tend to see reality as somewhat subjective and multiple, rather than objective and singular"; and that "comparative educators would tend not to see research as value free and unbiased; rather, they would accept the notion that their research is value laden and includes the biases of the researcher". The chapters in this book fit with these statements. The chapters themselves are based mostly on literature review, though the literature which the authors cover is both quantitative and qualitative; and all chapters either implicitly or explicitly recognise the role of the researcher in selection and interpretation of data.

Four years after the publication of the article by Rust et al., a content analysis of articles in the same three journals was presented by a related team (Henrickson et al. 2003). This team decided to focus on theory in the field, but met the initial obstacle that many articles failed to indicate the authors' theoretical orientations. The researchers therefore contacted the authors, asking them to reflect on their previously published articles and to indicate what relevance theory had had in those articles. This procedure allowed Henrickson et al. to assess the nature of different theoretical orientations within the comparative education community, and to gain a sense of the dynamics of theory use.

From this procedure, Henrickson et al. (2003, p. 11) secured usable data from 196 authors. Among these, 14.8 per cent stated that their articles should not be identified with any theory. Authors in this group typically

asserted that their studies were descriptive in nature, dealing mainly with direct, concrete, sense experience involving specific times, institutions, systems, names and places. These authors saw their work as largely practice oriented (3.8 on a 5-point scale). The authors who did see their work as having a theoretical orientation were asked to identify the disciplinary traditions within which the articles had been framed. Over 80 per cent indicated some reliance on sociology, while almost 70 per cent indicated some reliance on political science. Almost 63 per cent of the responding authors reported drawing on history, and approximately half of them relied to some degree on economics. Most authors took multi-theoretical perspectives. However, psychology was barely represented; and even professional education outside the social science disciplines was not well represented. The survey indicated that theoretical orientations were increasingly evident over time. Concerning paradigmatic shifts, the survey noted the strength of structuralism during the 1970s and early 1980s, but that humanism had grown significantly during the 1980s and 1990s. Radical humanism had become particularly active, and over 26.5 per cent of the studies were associated with it (p. 20).

Both Rust et al. (1999) and Henrickson et al. (2003) recognised that scholars who identify with the field of comparative education commonly publish in other journals in addition to those which explicitly focus on the field. A corollary may also hold: scholars whose work is informed by particular disciplines may choose mainly to publish in the journals of those disciplines rather than in the journals with an explicit focus on comparative education. Further, once the emphases of journals become established, those emphases may be maintained by self-selection. Thus, the authors with disciplinary orientations to sociology, political science, history and economics may submit their work to particular journals because they see that the journals already publish allied work, and authors working in the domain of psychology may not feel attracted to those journals because they do not see existing work that relates to their specialisms. Caution is therefore needed in the use of particular journals to characterise the field as a whole.

Within the present book, two authors explicitly declare disciplinary orientations at the outset of their chapters, and both include psychology in the list. Thus, Potts (Chapter 3) states that her background is in history, psychology and philosophy; and Watkins (Chapter 13) highlights psychology and, earlier, mathematical statistics. Other authors have not declared their disciplinary orientations, but if pressed to do so would

include economics, history, mathematics, philosophy and sociology. Thus, this book also shows disciplinary diversity in the field, and has a stronger representation of some domains than was reflected in the survey by Henrickson et al. (2003).

Also important to note is that the surveys by Rust et al. (1999) and Henrickson et al. (2003) were based on journals that were published only in English and only in two countries. Those journals did attract authors who were competent in other languages and based in other countries; but again the processes of self-selection are likely to have generated biases. Surveys of journals and other activities of the 33 professional societies, which are members of the World Council of Comparative Education Societies (WCCES), show that each has its own characteristics and emphases not only in theoretical or applied orientation but also in the choice of topics for investigation.

Elaborating on the matter of topics, even cursory analysis would show for example that gender issues are a much stronger feature of conference presentations and other outputs of the US-based Comparative and International Education Society (CIES) than in the Japan Comparative Education Society (JCES). On another dimension, a much greater proportion of scholars in the British Association for International and Comparative Education (BAICE) is interested in Africa than is the case among the members of the Korean Comparative Education Society (KCES); and issues of postcolonial identity are much more likely to be discussed in the conferences of the Australian and New Zealand Comparative and International Education Society (ANZCIES) than in the Polish Comparative Education Society (PCES). These differences partly reflect leadership in the societies concerned, but also reflect differences in international links among particular countries as a result of languages, governments' foreign policies, and historical ties through colonialism or other forces. Also, major differences exist in the paradigmatic emphases of academic literatures written for example in Chinese, English, Korean, Russian and Spanish. For these and other reasons, it is often more appropriate, as observed by Cowen (2000b, p. 333), to note the coexistence of multiple comparative educations than to suppose that the field is unified and homogeneous.

At the same time, many people who undertake comparative studies of education are not members of these professional bodies and perhaps do not even identify with the field. Chapter 1 noted that categories of people who undertake comparative studies include policy makers and

employees of international agencies as well as academics. Policy makers are usually interested only in experiences elsewhere from which they think that practical lessons might be learned. International agencies are also expected to be practical, so that they might give appropriate advice to their clients. As such, policy makers and international agencies are much less likely than academics to be concerned with theories; and even among academics, some groups build their careers more strongly on consultancies and other practical work than on theoretical conceptualisation. With the advent of globalisation, government policy making and consultancy work are much more likely than before to have international dimensions; but, perhaps regrettably, such practitioners are relatively unlikely to identify with the field of comparative education or to use the tools associated with the field.

Finally, it is instructive to note continuities and changes as reflected in the contents of the present book. The themes in Parts I and III of the book, which include quantitative and qualitative approaches and issues of paradigmatic identity, echo much existing literature; and the units of analysis in Part II also all have antecedents. However, each chapter also brings a contemporary flavour and new insights; and the book brings some conceptual advance in the field. Among the innovative features is the juxtaposition of units of analysis in the 11 chapters in Part II. Certainly many scholars have undertaken comparisons in education across places, systems, times, cultures, etc., as is evident in the bibliographic references of each chapter. However, no previous book has undertaken commentary on units of analysis in quite the way that has been presented here. Even seasoned scholars in the field may feel that the juxtaposition of these presentations widens horizons and expands insights.

In addition, new themes in the book arise from the sorts of geomorphic shifts identified in Chapter 15. Political and economic realignments have impacted on comparative education as much as on other fields, and have determined the choices of countries on which external scholars have focused. Chapter 15 contrasted the visibility of China in international comparative education conferences and literature during the 1970s and the opening years of the present century. The growth of attention to China reflects not only that country's open-door policy but also its increased economic strength. New themes have also included the foci on international schools alluded to in Chapter 5, and on information and communication technologies examined in Chapter 14. Further, scholars have explored new combinations for analyses. Chapter 4

described a study which juxtaposed scores on school tests in individual states of the USA with scores in a range of countries elsewhere in the world. It also noted a study which took sub-national regions within different countries as the unit of analysis, comparing education and development in Northeast Brazil with patterns in Northeast Thailand. Such studies have taken the field a long way beyond the straightforward comparisons of patterns in whole countries which dominated for many years.

Insights from Comparative Education Research

Despite the diversity, many commonalities can be identified across the broad field of comparative education. Among these commonalities are generic insights which can be obtained, stimulated and fostered by comparative research. While the role of many academics is confined to enhancement of understanding, for practitioners the insights can be used for improvement in the quantity, quality, relevance or other characteristics of education systems, processes and outcomes.

Some of the classic scholars stressed the value of comparative study many decades ago. For example, Chapter 1 cited the well-known phrase of Sadler, who wrote in 1900 (reprinted 1964, p. 310) about the value of studying foreign systems of education in order to become “better fitted to study and understand our own”. This can be related to an equally well-known statement by Johann Wolfgang Goethe who, in his *Sprüche in Prosa* (quoted by Rust 2002b, p. 54), wrote: “He who knows nothing of foreign languages, knows nothing about his own”.

In turn, this perspective can be related to the role of comparative enquiry in “making strange patterns familiar, and familiar patterns strange”. The first part of this clause is about looking outwards, i.e. learning about patterns, usually in other places, that are unfamiliar. The second part of the clause is about reflection, challenging taken-for-granted assumptions about familiar patterns which may need to be called into question (see Spindler & Spindler 1982, p. 43; Choksi & Dyer 1997, p. 271).

A strong justification for the field of comparative education has also been presented by Watson (1996, p. 387). He recognised ambiguity and plurality within the field, but added:

[T]here is little doubt that comparative education research has led to a substantial increase in our understanding of, and awareness of,

educational systems and processes in different parts of the world; of the infinite variety of aims, purposes, philosophies and structures; and of the growing similarities of the issues facing educational policy-makers across the world.

Watson highlighted the wealth of statistical and other data available around the world – and since that time the volume and quality of data have increased substantially. Moreover, the access to such data has also greatly increased, in particular through the internet. Watson rightly added, however, that such data, information and knowledge are “not easily understood or analysed”. In this he perceived a role for comparative education:

Perhaps more significant than anything else ... is the realisation that education and development, education and social change and the impact of educational reform on society are far more complex than was originally thought.

This remark deserves underlining and elaboration. Many observers consider that one of the most important uses of comparative education research is the identification of models that are employed elsewhere and that can be imported for use in other settings. This is indeed a major practical reason for comparative study; but dangers exist in shallow treatment with methodological approaches that are not sound. Within the field of comparative education, this has long been recognised. Again to cite Sadler, writing in 1900 (reprinted 1964, p. 310):

We cannot wander at pleasure among the educational systems of the world, like a child strolling through a garden, and pick off a flower from one bush and some leaves from another, and then expect that if we stick what we have gathered into the soil at home, we shall have a living plant.

This statement was made by an individual who had led what McLean (1992, p. 3) described as “the most extensive study of foreign education ever undertaken in Britain”, and deserves continued attention in all countries at all times. As McLean added, however (1992, pp. 16–24), the lesson had not been well learned in the UK. As subsequently remarked by Reynolds and Farrell (1996, p. 5), the problem is “that just as the educational world is aware that effectiveness factors may not “travel” across countries, the political world is increasingly inclined to transfer features from one context to another”. Thus, while comparative education

research can indeed help politicians and others to identify practice elsewhere that could have domestic application, such research should also indicate the complexities involved.

In order to do this well, comparative education researchers need to pay close attention to both the choice and the application of methods. Care needs to be taken with the complexities of educational comparison and transfer discussed above, and sloppy research can be betrayed by linguistic and cultural pitfalls. Comparative studies of middle schools, for example, need to acknowledge that in the UK a “middle school” bridges primary and secondary education. This is very different from China, where the term (*zhongxue*) refers to an institution between primary and higher education, i.e. a secondary school. Again, in Hong Kong, the nature, roles and purposes of the secondary school History curricula (there are two) are very unlike those of the History curricula of the USA, for instance. The greater access to data afforded by the internet does not mean that the researcher’s guard can slip in ensuring the accuracy of the information thus obtained, even if the source is purportedly reliable. Academic rigour is of paramount importance. Some parts of the field of comparative education are regrettably amateurish and, because of that, possibly even dangerous.

This book has not provided, and has not sought to provide, a manual on specific ways to use particular tools; but it has presented an overview of the types of tools in the toolbox and of major contextual considerations which should influence the choices of tools. If the book has encouraged its readers to think more carefully about the field and about its strengths, challenges and potential, then it will have achieved its purpose.

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