NEW RESEARCH – NEW VOICES

New Voices in Norwegian Educational Research

Elisabeth Bjørnestad and
Janicke Heldal Stray (Eds.)

SensePublishers

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Volume 1

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This part of the series will focus on theoretical and empirical contributions that are unique and will provide important insights into the field of educational research across a range of contexts globally. This part of the series will collectively communicate new voices, new insights and new possibilities within the field of educational research. In particular the focus will be on scholars, students and communities that have often been excluded or marginalized within educational research and practice.

New Voices in Norwegian Educational Research

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HALLA B. HOLMARSDOTTIR

SERIES EDITOR INTRODUCTION

I am pleased to introduce a new book series, *New Research – New Voices*, published and distributed by Sense Publishers. This series contains two strands, one dedicated to cutting-edge titles focusing on research methodology, and the other focusing on new theoretical and empirical developments that are unique and will provide important insights into the field of educational research across a range of contexts globally. The issues that will be highlighted in this series range from state-of-the-art scholarship on methodology to volumes focusing on new empirical and theoretical insights. The titles will comprise innovative and intellectually rigorous monographs and edited collections which bridge schools of thought and cross the boundaries of conventional approaches. The series covers a broad range of issues focusing on not only empirical-analytical and interpretive approaches, but moreover on micro and macro studies, and quantitative and qualitative methods. Likewise, the issues in this series will collectively communicate new voices, new insights and new possibilities within the field of educational research. In particular the focus will be on scholars, students and communities that have often been excluded or marginalized within educational research and practice.

New Research – New Voices is sponsored by the Department of International Studies and Translation (IST) as Oslo and Akershus University College (OAUC), located in Oslo Norway. This Department manages reviews of submissions and provides editorial assistance in manuscript preparation. Selected post-graduate students have the unique opportunity to gain editing and publishing experience working or interning at IST as a member of our editorial team. The series is supported by a distinguished network of leading international scholars and development professionals who serve on the International Advisory Board and participate in the selection and review process for manuscript development. Working with our International Advisory Board, periodic calls are issued for contributions to this series from among the most influential associations and organizations in international studies in education, including the World Council of Comparative Education Societies and the Comparative and International Education Society, as well as a range of other education societies and networks globally.

As the Editor for *New Research – New Voices* Series, I am very pleased to introduce the first volume—*New Voices in Norwegian Educational Research*—which is a contribution to the second strand of `the series. This volume reflects on the shift in educational research traditions and ideas in Norway. The editors of this volume were interested in shedding light on the generation shift currently

taking place in educational research in Norway and the way in which new actors in educational research are reshaping the field. Not only is the new generation of actors challenging many of the ideas and research agendas pursued by the previous generation, but they are also expanding on and re-developing some of these ideas and research agendas. This brings to mind the publication by Crossley and Jarvis (2001) in which they engaged with researchers in the field of Comparative and International Education in an attempt to shed light on a wide range of perspectives in the contemporary 'reconceptualisation' of comparative and international studies in education. This volume is likewise an attempt to understand and engage with the 'reconceptualisation' of Norwegian educational research. Moreover, this volume includes the absent voices in the publication by Crossley and Jarvis (2001), namely voices from researches in the northernmost parts of Europe, from Norway in particular. Not only does the volume look at the ways in which the field is currently developing in this part of the world, but it also reflects on the prospects for the future development of the field and as such differentiates this initiative from previous 'state of the art' projects. The explicit intention here is both to 'bridge' and go beyond the various cultures and traditions that have, to date, generated parameters for educational research within the region.

In future volumes in the *New Research – New Voices* series, I particularly encourage the generation of scholars and research communities, policy makers, and practitioners from around the world, particularly those who have commonly been excluded or marginalized within educational research and practice. I hope this initial volume will encourage prospective authors and editors to submit manuscript proposals to the *New Research – New Voices* series about their current research and project interests.

REFERENCE

Crossley, M., & Jarvis, P. (2001). Introduction: context matters. *Comparative Education, 37*(4), 405–408.

ELISABETH BJØRNESTAD & JANICKE HELDAL STRAY

1. NEW VOICES IN NORWEGIAN EDUCATIONAL RESEARCH

This book consists of contributions written by former research fellows from the Department of Education, Institute of Educational Research, University of Oslo. Only one of these contributors have achieved status as professors (Øistein Anmarkrud), and all are still in the process of establishing themselves in the highest level of the Norwegian academic system. The Department of Education is the oldest educational research institution in Norway (established in 1938), built and formed by some of the finest Norwegian researchers in 1930s, when pedagogics was being established as a research field in Norway. The Department has strong traditions in educating researchers who became strong voices in the Norwegian educational system. But now there is a shift in generation; academics educated in the 1960s and 1970s are about to retire, and a new generation of researchers is expanding and further developing the field.

The Norwegian educational system, like educational systems all over the world, is being increasingly influenced by international trends, greater use of evidence-based research and increased political demands for monitoring the results of education. This development has affected the research community with stronger demands for data on issues that are politically relevant, cuts in funding, pressure for production and publications, and higher demands for evidence-based teaching and expectations for student performance. There is also increasingly a need to remind policy makers and politicians of the scope of education. Not only does education ensure the country's ability to compete on an international level, to contribute to an educational system that are one of the best in the world, but also to put the child, the pupil in the centre for educationalist. We have an obligation towards the upcoming generation, and it is essential to always balance the needs of society and the needs of the pupil as an individual. This balance is illustrated in this book, which sheds light on both expanding established educational research traditions and respecting the necessity and meaning of learning for each individual. Common to all the research contributions in this book is respect for the pupil and the process of learning.

The contributions in this book reflect research interests in Norwegian education. The book does not comprehensively cover all education research interests in Norway, yet it still reveals the breadth in the research community. It also gives insight into the challenges that Norway is facing in a changing and more internationalized world.

E. Bjørnestad & J. Heldal Stray (Eds.), New Voices in Norwegian Educational Research, 1–5.

We have divided this book into three parts. Part one is devoted to motivation, strategies and innovation. Christian Brandmo presents theories of and research on achievement goals. Over the last several decades, there has been a tremendous amount of research related to such goals worldwide. However, only a few scholars and educators in the Nordic countries have explored them. In this chapter, Brandmo relates the history and development of achievement goal theories. Next, he highlights these goals' significance for students' learning processes and outcomes. Finally, he introduces the highly debated issues surrounding the theories and suggests ideas for further research and teaching. Due to its broad scope and overview, this chapter might serve well as an introduction to achievement goals for students at the master's or doctoral level.

Also in part one, Gunnar Bjørnebekk examines achievement motives and achievement goal-type focus. He emphasizes how motives and achievement goal-type focus are related to important outcomes in the classroom. Investigating the relationships between the two constructs is essential to providing constructive input to teachers regarding the creation of an optimal achievement climate. In this chapter Bjørnebekk presents the theoretical framework and results of four experiments that examined the main and interaction effects of motives and achievement goal-type situations on performance, motivation and affects in classrooms settings.

Whereas Brandmo and Bjørnebekk discuss motivation and achievement goals, Øistein Anmarkrud, in collaboration with doctoral student Leila Ferguson, discusses differences in reading of single and multiple texts with a focus on models of text comprehension and individual differences, specifically regarding comprehension strategies and personal epistemology. The main body of research-based knowledge on adolescents' text comprehension originates in studies within the single text paradigm. However, the information revolution of the last decades requires adolescents to handle and interpret multiple texts in their daily learning. The chapter is based on a series of empirical studies.

Ending this part of the volume is a chapter written by Dorothy Sutherland Olsen. She builds upon previous research using the work of Vygotsky and his perspectives on learning and development to investigate the classroom and learning. In recent years these perspectives have been used to study changes in the workplace, collaborative work and technological development. This chapter reviews recent studies of innovation and technological development, discusses the contributions of socio-cultural perspectives and reflects upon the potential for these perspectives to improve our understanding of innovation processes.

In part two we turn our attention to the use of technology and digital tools in the learning context. Norway is at the forefront when it comes to the proposition of the population having access to computer technology and internet. When Norwegian students enter upper secondary school they are expected to be able to use a computer or a tablet for learning purposes. The chapter by Greta Guðmundsdóttir and Ove Hatlevik focuses on students' digital competence, particularly their ability to use computers to create and publish presentations, reports and assignments through

different media types. Their study has a sample of 3,335 students, and the findings indicate that both family background and motivation play roles in students' digital production abilities at school and can explain their capabilities with regard to digital competence.

Next is a chapter written by Hatlevik, in collaboration with Vegard Nergård, discussing how students in secondary schools use social networking sites such as Facebook and Skype to communicate with friends and other students. Currently, almost all students in upper secondary use social networking sites daily or several times each week. Social networking is part of students' identities and a way to create their identities. The aim of this chapter is to study how students describe their own use of social networks at school and to elaborate on the role of social networking in the creation of students' identities. Almost all students in upper secondary school have access to their own laptop or tablet in the classroom. The students participate both in the classroom and in virtual online communities, and they assume different roles in each arena.

Øystein Gilje ends part two by addressing young people's practices of digital composing and remixing by discussing a number of new Scandinavian studies on youth production and moving images. Formal and non-formal learning contexts are increasingly allowing youngsters to participate in new multimodal text practices across a wide range of subjects in Scandinavia. Digital editing technology has made it possible to work within the fields of photography, animation and moving images, and more recently, with apps on tablets. Like photography and social media, moving image production has migrated to the core of everyday literacy practices for many youngsters around the world. The chapter presents four recent Scandinavian empirical studies on youth production and moving images and contributes to research on digital composing within fields such as New Literacy Studies and socio-cultural perspectives on learning, which is an emerging field among young researchers in Scandinavian countries.

Part three is devoted to questions about teaching and learning. Elisabeth Bjørnestad focuses on how circle time can be understood as whole class teaching in the six-year-olds' classroom. Until early 1990 six-year-olds were a part of the Early Childhood Education and Care (ECEC) system. After reform changes and implementations of new school curricula in Norway (L97) and Sweden (Lpo94), six-year-olds were transferred to a school context and their lessons were based on the best from both the preschool tradition and the school tradition. Bjørnestad finds in her research that circle time, one of the main teacher-led activities in ECEC, also appears to be one of the most frequently used teacher-led activities in the six-year-olds' classroom. In this chapter Bjørnestad describes features, form and content of the six-year-olds' circle time and discusses if and how circle time can be interpreted as a form of whole class teaching. Due to recent years' demands and focus on school subjects for the first grade and preschool class, it is important to raise awareness about what takes place during circle time to determine if it is an appropriate teaching strategy for six-year-olds.

Veslemøy Rydland and doctoral student Svetlana Kucherenko explore how social identities are negotiated through linguistic resources, such as language preference and language alternation within multi-ethnic Norwegian preschool and school classrooms. More specifically, they investigate how one bilingual girl, Asiye, used her two languages, Turkish and Norwegian, as resources in negotiating belonging and social status vis-à-vis her peers who were non-Turkish and Turkish-Norwegian speakers. Interviews conducted with Asiye and her parents form the backdrop for analyzing the turn-by-turn interactions among Asiye and her peers. The analysis demonstrates how Asiye alternated between Turkish and Norwegian as a subtle and context-sensitive way of signalling her emotional ties within specific peer relationships. This case study contributes to the current literature on bilingual children's identity development by revealing how language use is both highly context sensitive and closely intertwined with issues of belonging.

Guri Jørstad Wingård also examines the pluralistic classroom. Wingård shows how discursive constructions of collective identity and otherness can be found in the political debate about religious, ethical and life stance education in Norway in the 1990s and in more recent debate. The chapter discusses whether pluralism is currently a more accepted part of the understanding of Norwegian identity. Wingård suggests that pluralism is still understood as something new and superfluous, brought into the Norwegian society by "the other", the outsider. However, she also presents interpretations of current debate that could indicate possible concepts of collective identity that include pluralism, especially regarding the increased focus on the child's independent religious freedom.

Concluding part three, Janicke Heldal Stray compares Norwegian policy papers with international recommendations for strengthening democracy through education. Norway has a strong commitment to democracy, and this commitment is reflected in the Norwegian Educational Act. Through analysis of the policy papers underpinning the current curriculum from 2006, called *Knowledge Promotion*, Stray suggests that the present curriculum has weakened the democratic mandate of schooling. She further suggests that this is a consequence of the impact of international comparative tests, like the PISA and TIMMS. This chapter also highlights the internationalization of the Norwegian educational system, which is reflected throughout the educational institutions, from the individual pupil, the classroom and the new rhetoric on education.

The overarching idea of this publication is to include chapters written by up-and-coming researchers within the field of Norwegian, and therefore Nordic, education. The combinations of chapters is seen as a means of informing non-Nordic readers of both the present practices in Norwegian education and the challenges it is facing.

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PART I

MOTIVATION, STRATEGIES AND INNOVATION

CHRISTIAN BRANDMO

2. ACHIEVEMENT GOALS: WHAT ARE THEY AND WHAT SIGNIFICANCE DO THEY HAVE FOR STUDENTS' LEARNING AND PERFORMANCE?

INTRODUCTION

Over the last three decades, the construct of achievement goals has received a great deal of attention internationally in the field of educational psychology. However, Nordic scholars and educators have not paid significant attention to this construct until recently. In this paper, I will first briefly review the history of the achievement goal construct. I will then present empirical findings that illustrate the significance of achievement goals for students' learning and academic performance. In addition, some ongoing discussions in the field of achievement goals theory will be highlighted. Finally, I will give some suggestions for further research and teaching.

THE FOUNDATION OF ACHIEVEMENT GOAL THEORY

Achievement goal theory can be traced back to the University of Illinois in the late seventies, where Carol Dweck, Carol Ames, Martin Maehr, and John Nicholls were working at the time (Elliot, 2005). In the fall of 1977, these researchers met in a seminar series on achievement motivation, where their discussions initiated a new way of thinking about goals and incentives in achievement situations (Maehr, Ames, Covington, & Weiner, 2006). Over the next years the researchers published several articles and book chapters (e.g. Ames, 1984; Ames & Ames, 1981; Dweck, 1986; Dweck & Elliott, 1983; Maehr & Nicholls, 1980; Nicholls, 1984) that together with other contributions (e.g. Covington & Omelich, 1979, 1984, 1985) created the basis of achievement goal theory.

In early studies on achievement goals, researchers suggested diverse conceptualizations and identified different central concepts. For instance, Nicholls' conceptualization of achievement goals emerged from his research on the concept of ability in children (Elliot, 2005). Nicholls (1984) suggested that ability can be considered high or low according to two different standards: either by reference to the individual's own past performance and knowledge, or as the individual's capacity relative to that of others. In cases of the first conception, Nicholls suggested that gains in mastery would indicate competence. In cases of the latter conception, however, mastery would not be considered a satisfactory criterion to demonstrate

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high capacity; Nicholls suggested that the individual would have to achieve more with equal effort, or through less effort than others for an equal performance. Because this conceptualization required the individual to adopt a social self-evaluative perspective, Nicholls described this as a state in which individuals seek to demonstrate ability in a more differentiated sense, and termed it *ego involvement*. Comparison only with one's own previous performance was described as a search to demonstrate ability in a less differentiated sense, and was termed *task involvement*.

Dweck's work on achievement goals, on the other hand, stemmed from her research on learned helplessness. During a series of studies in the seventies, she found that children responded differently to failure (Elliot, 2005). First, she hypothesized that children who considered intelligence to be fixed (entity theory) tended to adopt *performance goals*, while children with a malleable view of intelligence (incremental theory) tended to adopt *learning goals* (Dweck, 1986). Performance goals were defined as goals to gain positive judgment and avoid negative judgment of competence. Learning goals were defined as goals to increase learning. Next, Dweck (1986) hypothesized that learning goals would have a positive impact on learning (seeking challenge, high persistence) independent of the individual's perception of their own ability. Performance goals, in contrast, could lead to helpless behavior (avoidance of challenges and withdrawal) if the individual judged their own ability to be low. Taken together, these suggestions contributed to the favoring of learning goals, and to the assumption that the adoption of performance goals was quite a risky affair in learning contexts.

According to Elliot (2005) two articles by Ames and Archer (1987, 1988) laid out the rationale for an integrative achievement goal theory. First, Ames and Archer argued that the conceptual accounts proposed by the Nicholls (1984), Dweck (1986), Maehr (1983) Ames (1984), Covington and Omelich (1984) were similar enough to be integrated into a dichotomy of mastery and performance goals. Second, they introduced a quite broad definition of achievement goals, seeing them as a network of beliefs about learning and school-related practices, including how children learn, causes of success, and the relative importance of ability versus effort characteristics (Ames & Archer, 1987, p. 409). In their 1988 article, Ames and Archer fully introduced the term goal orientation, reflecting the fact that various beliefs were presumed to be interrelated within each type of goal (Elliot, 2005). Later on, Ames (1992) defined achievement goals as "an integrated pattern of beliefs, attribution, and affect that produces the intentions of behavior and that is represented by different ways of approaching, engaging in, and responding to achievement-type activities" (p. 261). In a sense, achievement goals were considered to include both purposes of achievement behavior and standards for the evaluation of outcomes. It should also be mentioned that the founders of the achievement goal theory did not consider mastery goals and performance goals to be mutually exclusive, nor were they seen as concepts at the opposite end of a continuum. The reason these aforementioned goal types were suggested was the patterns that emerged among students (Dweck & Elliott, 1983; Elliot, 2005).

REVISIONS OF THE ACHIEVEMENT GOAL THEORY

Ames and Archer's articles (Ames, 1992; Ames & Archer, 1988), which suggested that achievement goals could be conceptualized not only at the individual level but at the classroom level as well (classroom goal structures), inspired a large body of research throughout the 1990s focusing on, for example, testing how these goals were influenced by various contexts, and how they related to performance and other variables, such as learning strategies. However, there were no essential changes in the theory until 1996/1997. At that time, several articles were published (Elliot & Harackiewicz, 1996; Middleton & Midgley, 1997; Skaalvik, 1997) separating the performance goal into two distinct types of goals: the performance approach goal and the performance avoidance goal. Performance approach goals focused on achieving well relative to others, while performance avoidance goals focused on avoiding demonstration of incompetence relative to others. The most thorough theoretical work on this trichotomous model of achievement goals was developed by Andrew J. Elliot, who a few years earlier had written his PhD on approach and avoidance motivation with Judith M. Harackiewicz as his advisor (Elliot, 2005; Elliot & Church, 1997; Elliot & Harackiewicz, 1996). First, he suggested that achievement motives (Atkinson, 1957) should be considered antecedents of achievement goals (Elliot & Church, 1997). In addition, he proposed that perceived competence be viewed as an antecedent rather than a moderator of goal adoption. Moreover, he suggested that mastery goals were related to intrinsic motivation, while performance approach goals were related to performance. It should be underscored that even though Elliot considered perceived competence to be an important antecedent of individuals' goal adoption, many other factors, such as implicit theories of intelligence, task characteristics, and context, were also assumed to contribute to the goal adoption (Elliot, 2005).

In 1999, Elliot extended the achievement goal theory again by introducing the mastery avoidance goal, representing a self-referential focus on avoiding the loss of one's skills and ability (Elliot, 1999). By this extension, we were presented with a 2×2 framework of achievement goals in which the first dimension represented ways that competence can be defined (intrapersonal and interpersonal), and the second dimension demonstrated the ways that competence can be valenced (approaching and avoiding) (see Figure 1). The distinction between approach and avoidance goals also changed how many researchers considered the various goals with regard to their consequences. As previously mentioned, empirical studies from the eighties mostly indicated that mastery goals were preferred to performance goals in the contexts of school and learning. However, with the introduction of the approach and avoidance distinction, several studies showed that performance approach goals could lead to positive outcomes as well, particularly for older students. For instance, several studies found positive relations between performance approach goals and variables such as effort, persistence, and grades (Church, Elliot, & Gable, 2001; Elliot & Church, 1997; Elliot & McGregor, 1999, 2001;

		Definition	
		Absolute/intrapersonal (Mastery)	Normative (Performance)
Valence	Positive (approaching success)	Mastery-approach goals	Performance-approach goals
	Negative (avoiding failure)	Mastery-avoidance goals	Performance-avoidance goals

Figure 1. The 2 × 2 achievement goal framework presented in Elliot & McGregor (2001, p. 502). Definition and valence is suggested to represents two dimensions of competence. While absolute/intrapersonal and normative (in relation to other) represents two ways that competence can be defined, do positive and negative represents two ways that competence can be valenced.

Elliot, McGregor, & Gable, 1999; Harackiewicz, Baron, Tauer, Carter, & Elliot, 2000; Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997). In addition, some studies also found positive relations between performance approach goals and variables such as self-efficacy, task-value, and the use of cognitive and metacognitive strategies, although theses relations were weaker than corresponding relations to mastery approach goals (Elliot et al., 1999; Elliot & Thrash, 2001; Wolters, Yu, & Pintrich, 1996). However, not all researchers accepted the more positive view of performance goals in the first place. Several researchers criticized this new perspective based on inconsistent findings and weaknesses in study design, as well as validity issues (Brophy, 2005; Kaplan & Middleton, 2002; Midgley, Kaplan, & Middleton, 2001). For instance, Midgley et al. (2001) titled their article "Performance-approach goals: Good For What, For Whom, Under What Circumstances, and At What cost". Based on a review of the previous studies and normative considerations, they quite polemically addressed limitations in the thinking about performance approach goals and outcomes related to factors such as students' age, gender, competence perception, and various types of tasks and settings. One important issue was whether students with high preferences for performance approach goals would become performance avoidance-oriented if they did not succeed (Middleton, Kaplan, & Midgley, 2004). Another issue was the kind of school culture that an increasing emphasis on performance goals would favor. Midgley et al. (2001) concluded that mastery goals were still preferable to performance goals.

This debate culminated in an article in which several researchers came together to formulate a revised goal theory (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002). Their statements can be summarized in three points: first, they stated that the inclusion of the valence dimension in goal theory (approach and

avoidance) was fruitful if it included either performance and mastery goals (2 + 2 framework), or performance goals only (trichotomous framework). Second, they adopted a more positive and nuanced view of performance goals, within which they acknowledged that performance approach goals could encourage positive outcomes in students. Finally, they stated that students could have *multiple goals*. This latter point was founded upon hypotheses suggesting that individuals could adopt more than one type of goal for a task (Barron & Harackiewicz, 2001) and previous research indicating that combinations of various goals could have interaction effects on various outcome variables (Elliot & Church, 1997; Pintrich, 2000a).

ANTECEDENTS, MODERATORS AND CONSEQUENCES OF ACHIEVEMENT GOALS

Over the last decades, tremendous amount of studies have been conducted with the purpose of determining the antecedents, moderators and consequences of achievement goals. With respect to antecedents, Elliot's group made several significant contributions around the beginning of the 2000s. For instance, they linked personality traits to students' goal preferences; more specifically, extraversion, positive emotionality, and behavior activation predicted approach temperament and, in turn, mastery and performance approach goals (Elliot & Thrash, 2002). Neuroticism, negative emotionality, and behavior inhibition were found to predict avoidance temperament, which in turn predicted both performance goals. However, their most comprehensive testing of antecedents was presented in their "2 × 2 article" from 2001, in which, in addition to emotionality and personal belief, they also tested the links between these aspects and parents' styles of upbringing (Elliot & McGregor, 2001). Table 1 gives an overview of their findings. Among other trends, what can be seen in Table 1 is that various parental feedback styles predicted diverse goals. For instance, person-focused negative feedback such as "you are not a nice person" (e.g., after the child had done something wrong) predicted avoidance goals, while positive conditional approval such as "you know how important it is that you do well in school to make me happy" (e.g., when the child is getting ready to leave for school) predicted performance approach goals. They also found that the links between parental feedback and goals depended on which of the parents was giving the feedback. For instance, the relationships between worry and performance avoidance goals become significant only when the mother was the source (e.g., mother made me afraid to make mistakes). However, a limitation of the studies by Elliot and colleagues is the use of college samples only, and that results were based on retrospective self-reported data.

When it comes to the potential consequences of achievement goals, one should be careful about drawing generalized inferences based on only a few studies,

Table 1. Antecedents of achievement goals from Elliot & McGregor (2001, p. 515)

Mastery approach	*Mastery avoidance*	*Performance approach*	*Performance avoidance*
• Need for achievement (+) • Work mastery (+) • Self-determination (+) • Competence valuation (+) • Perceived class engagement (+)	• Fear of failure (+) • Self-determination (–) • Entity theory of intelligence (+) • Incremental theory of intelligence (–) • Parents person-focused negative feedback (+) • Parents worry (+) • Competence valuation (+) • Perceived class engagement (+)	• Need for achievement (+) • Competiveness (+) • Fear of failure (+) • Father person-focused positive feedback (+) • Parents conditional approval (+) • Competence valuation (+)	• Fear of failure (+) • Self-determination (–) • Entity theory of intelligence (+) • Parents person-focused negative feedback (+) • Mother worry (+) • Competence valuation (+)

Note: (+) = positive relationship, (–) = negative relationship. See the original article for more extensive explanation of the variables and results.

due to the large number of inconsistent findings. As a result, the overview of relations presented below is built on majority findings in several empirical studies, reviews and meta-studies (Brandmo, 2011; Elliot & McGregor, 2001; Harackiewicz, Baron, Tauer, & Elliot, 2002; Harackiewicz, Barron, et al., 2002; Harackiewicz, Durik, Barron, Linnenbrink-Garcia, & Tauer, 2008; Hulleman, Durik, Schweigert, & Harackiewicz, 2008; Linnenbrink, Tyson, & Patall, 2008; Senko, Hulleman, & Harackiewicz, 2011). What can be seen in Table 2 is that both mastery approach and performance approach goals predict school achievement; however, performance goals seem to be a stronger predictor of achievement than mastery approach goals, particularly in higher grades (college and upper secondary) and when the achievement is measured through formal grades or exam performance. With regard to the relationship between achievement goals and strategies, mastery approach goals appear to be much stronger (moderate effect sizes) and more consistently related to deeper strategies than performance approach goals. However, it should be mentioned that most of the research that concerning the relationship between students' use of learning strategies and goals is based on self-reports. According to research that focuses specifically on learning strategies, there may be divergence between what students report they do and what they actually do (Winne, 2010; Winne & Jamieson-Noel, 2002, 2003). Due to the mediating role that achievement goals may have, it should also be mentioned that some motivational variables can be seen as both antecedents and outcomes. For instance, when a student is interested in a particular subject, an adoption of a mastery approach goal may guide the student's cognitions and behavior, which may in turn lead to a further development of that particular interest (Harackiewicz et al., 2008).

Table 2. Frequently reported consequences of achievement goals

Mastery approach	*Mastery avoidance*	*Performance approach*	*Performance avoidance*
• School achievement (+)	• Worry (+)	• School achievement (+)	• School achievement (–)
• Task/subject interest (+)	• Emotionality (+)	• Exam performance (+)	• Exam performance (–)
• Enjoyment (+)	• Disorganization (+)	• Competiveness (+)	• Disorganization (+)
• Utility value (+)		• Surface strategies (+)	• Surface strategies (+)
• Surface strategies (+)		• Deep strategies (+)	• Deep strategies (–)
• Deep strategies (+)			

Note: (+) = positive relationship, (–) = negative relationship. Remarks: 1) In the review of Linnenbrink et al.(2008), which consisted of about 90 studies, they found positive correlation between master approach goals and achievement and between performance goals and achievement in about 40% of the self-report studies respectively. 2) In Brandmo's review (2011) 13 of 27 studies did find positive correlation between master approach goals and achievement while 21 of 25 studies did find positive correlation between performance approach goals and achievement. 3) Brandmo (2011) found significant positive relations between performance approach goals and deep strategies in 12 of 22 studies while 22 of 22 studies did find significant positive relations between mastery approach goals and deep strategies.

A moderator is a variable that changes the relationship between two other variables (Baron & Kenny, 1986). In the late 1990s, a frequently discussed issue was whether competence perceptions (e.g., self-efficacy) moderated the relationship between achievement goals and achievement. For instance, would performance approach goals only be favorable for students with high self-efficacy? As previously mentioned, Elliot and Church (1997) propose that competence perception should be considered an antecedent to achievement goals (why the individual choose a goal preference in the first place) rather than as a moderator in the achievement situation. Nevertheless, in a review article Linnenbrink et al. (2008) examined this moderator question based on a handful of studies. In studies that used self-report measures, they found significant main effects of both performance approach goals and perceived competence on achievement; however, none of the studies revealed significant interaction effects. The results of the experimental studies revealed a different pattern. Three of four studies found significant interactions, and all of them indicated that performance approach goals were detrimental when perceived competence was low. Linnenbrink et al. (2008) suggest that this interaction only became significant under experimental manipulation because these studies measure prospective perceived competence, in contrast to the correlation studies that measure retrospective perceived competence. However, we should refrain from drawing general conclusions on this rather limited empirical basis. It may very well be that competence perceptions, and particularly self-efficacy, are precursors of students' goal preference, although this may not necessarily exclude competence perceptions from being a moderator as well. Still, more research that addresses this specific question is needed.Taking the multiple goal perspective into account, most studies show that a high preference for mastery approach goals

combined with high preference for performance approach goals is most favorable with regard to achievement (Brandmo, 2011; Linnenbrink et al., 2008; Senko et al., 2011). Meanwhile, combinations of high preferences for avoidance goals with low preferences for approach goals seem to be least favorable for achievement. However, the picture may be more complex, as is illustrated in a study by Pintrich (2000a). The study was set up to find how the various goal combinations were related to future achievement in mathematics after three, seven, and eighteen months, respectively. While students who reported a combination of high performance approach goals with low mastery approach goals received the highest achievement scores after three and seven months, the students who reported high preferences for both performance approach goals and mastery approach goals received the highest achievement scores after 18 months. In addition, the study shows that students with high preferences for mastery goals had the lowest relative decrease in achievement over the time period (the achievement scores decreased for all students). Even though it is possible that the students changed their goal preferences to some degree during the period, the results may well also indicate that mastery approach goals are important in order to sustain enthusiastic over time.

With respect to strategy use, high preferences for mastery approach goals combined with high preferences for performance approach goals seem to be favorable to the comprehensive use of learning strategies (both surface and deep strategies) (Archer, 1994; Cano & Berbén, 2009; Pintrich, 2000a; Seifert, 1996). In contrast, students who keep the combination of low preferences for mastery approach goals with low preferences for performance approach goals seem to use the least strategies. Moreover, the aforementioned studies indicate that pursue for mastery approach goals seem to be the most significant goal-related factor concerning students' strategy use.

STABILITY OF ACHIEVEMENT GOALS, AN ONGOING DISCUSSION

A currently discussed issue within the field of achievement goal theory is whether individuals' goal preferences are stable or dynamic. Originally, achievement goals were defined as a situated and dynamic construct (Dweck, 1986; Dweck & Elliott, 1983; Kaplan & Maehr, 2007; Nicholls, 1984). However, this does not mean that the founders of the theory overlooked the more stable characteristics of the person such as motive-dispositions, temperaments, etc.; rather, they put more emphasis on how the individual constructed and interpreted the specific achievement situations. In recent years, a growing number of researchers have begun to consider achievement goals as a more stable and trait-like construct (Elliot, 2005). An argument for stability is, for instance, that affect and cognitions in achievement situations are more closely linked to fairly stable variables such as personality-traits, and this link may in turn contribute to more stable response tendencies across tasks, situations, and time. Several studies also confirm the link

between achievement goals and stable factors like theory of intelligence (Cury, Elliot, Da Fonseca, & Moller, 2006; Dweck & Leggett, 1988), motive-disposition (Elliot & Church, 1997; Harackiewicz et al., 1997), and temperament (Elliot & Thrash, 2002). On the other hand, there are studies indicating that contextual factors can influence children's and adolescents' adoptions of achievement goals, given that the stimulus is present over some time. The aforementioned study from Elliot and McGregor (2001) concerning parents' feedback style is one example. In addition, researchers have always presumed that task characteristics, classroom environment, teaching style, and feedback and assessment systems can influence students' goal adoption (Ames, 1992).

Although there are only a few studies that have empirically tested the stability of achievement goals, consistent findings give us a fairly clear impression. With respect to goal stability across school subjects such as between language and mathematics, or between domains such as sport and general schoolwork, the findings indicate a correlation between .60 and .80, which can be interpreted as relatively high stability (E. M. Anderman & Midgley, 1997; Duda & Nicholls, 1992; Stipek & Gralinski, 1996). Concerning stability over time, studies indicate a correlation between .40 and .60 across semesters and school years (E. M. Anderman & Midgley, 1997; L. H. Anderman & Anderman, 1999; Bong, 2005; Meece & Miller, 2001; Middleton et al., 2004; Seifert, 1996; Stipek & Gralinski, 1996; Wolters et al., 1996). In studies that examined the stability twice or more within a semester, the correlations are somewhat higher, from .60 to .80 (Elliot & McGregor, 2001; Fryer & Elliot, 2007; Muis & Edwards, 2009; Senko & Harackiewicz, 2005). If we take a closer look at the stability of the various goal types, recent studies indicate that performance approach goals are more stable than others over time and across tasks (Fryer & Elliot, 2007; Muis & Edwards, 2009). According to the same studies, mastery approach goals seem to be the goal type that fluctuates most over time and across tasks.

This relative stability of the achievement goals, and more specifically the indication of both stability and change, has forced many researchers to assume that achievement goals may be the object of self-regulation, particularly in light of the multiple goal perspective (Elliot & Church, 1997; Fryer & Elliot, 2007; Senko & Harackiewicz, 2005; Wolters, 2003). According to current models of self-regulation (Pintrich, 2000b; Winne & Hadwin, 1998; Zimmerman, 2000), the need for change or regulation of goals would be particularly prominent when students do not meet their own predefined standard. For instance, when a student with high preferences for performance approach goals wishes to receive the best exam score in their class but does not succeed, he may either decrease his preferences for performance-approach goals or change his preferences to another type of goal (e.g., performance avoidance goals or mastery approach goals). Thus, Senko and Harackiewicz (2005) proposed two kinds of goal regulation: goal switching and goal instensification. Goal switching is when a student changes from one goal type to another, usually contingent on competence feedback. In the aforementioned case, the student may

wish to protect his reputation and self-worth (Covington & Roberts, 1994) and therefore switch to another type of goal. He may either want to focus more on his own development and growth (change to mastery approach goals) or he may choose a more defensive strategy and try to avoid showing that he did not succeed (performance avoidance goals). Senko and Harackiewicz (2005) also describe situations in which students may shift from mastery goals to performance goals; these can be situations where a mastery-oriented student has fulfilled his initial goals and seeks new challenges through competition with his peers (Bandura, 1986; Zimmerman & Kitsantas, 1997). Goal intensification is a simpler form of regulation in which the students intensify or reduce their pursuit for one goal type without concurrent adjustments of their pursuit for other goals. Returning to the aforementioned example with the student who did not succeed in receiving a better grade than his peers, goal intensification would imply that the student reduce his preferences for performance approach goals without making adjustments to other goal types. Even if both of Senko and Harackiewicz's (2005) hypotheses seem reasonable, they also raise many new questions. For instance, to what degree are individuals able to regulate their goals consciously? Is there a radical shift (conceptual change) that happens, or is it a minor adjustment? Taking into account recent research on stability and change (Brandmo & Bjørnebekk, submitted; Fryer & Elliot, 2007; Muis & Edwards, 2009; Senko & Harackiewicz, 2005) it seems most reasonable that the various goal types can be regulated independently of each other. Furthermore, unless students are met with situations that truly challenge them cognitively and emotionally, it also appears most reasonable that changes in students' goal preferences would happen gradually over time, contingent on various experiences.

CONCEPTUAL DIVERSITY AND MEASUREMENT ISSUES

As previously mentioned, in the early days of achievement goal theory there were several theories with various conceptions that described roughly the same phenomenon. After some years, most researchers adopted the labels from Ames, namely mastery and performance goals, and used the terms goal orientation or achievement goals at the superior level. Even though researchers are using the same labels, they do not necessarily refer to the same content.

First, there may be differences in the way researchers conceptualize the achievement goal construct (Elliot, 2005; Elliot & Murayama, 2008). For instance, one line of research seems to define achievement goals more broadly as purposes of achievement behavior that include beliefs, attributions, and affect (Ames, 1992; Kaplan & Maehr, 2007). Another line of research has suggested a more constrained conceptualization that focuses on the end state of competence (aim and purposes or aim only) and differentiates goals from affect, attributions, beliefs, and interests (Elliot & Murayama, 2008; Elliot & Thrash, 2002; Hulleman, Schrager, Bodmann, & Harackiewicz, 2010). Because the conceptualization, and in turn operationalization,

may influence how the goals relate to other concepts such as achievement, it is important to examine how goals are defined and how they are measured. Indeed, this was opportunely illustrated by Hulleman et al.(2010): their meta-study, with the witty subtitle "Different Labels for the Same Construct or Different Construct with Same Label", reviewed 243 correlation studies with the purpose of examining their construct validity, operationalization, and predictive validity. Every item was coded in theoretically grounded subcategories; for instance, performance approach items were coded as 1) performance-normative (e.g., "My goal this semester is to get a better grade than other students"), 2) performance-appearance (e.g., "It is important to me that my peers think I am good at sports"), 3) performance-evaluative (e.g., "I want to show my teacher that I'm smarter than other students"), 4) performance-general goal (e.g., "Getting good grades in my math class is more important to me than learning the material,"), and 5) performance–no goal (e.g., "In study or learning, you are successful only if you learn more than others"). When they analyzed the predictive value of these subcategories on achievement (loaded categories as moderators), they found that the various subcategories predicted achievement very differently. Although all of the items represented performance approach goals, the performance-normative goal (focus on achieving better than others achieve) predicted achievement at effect size .14 (can be interpreted as a correlation), while the merge subcategory of performance-appearance and performance-evaluative (demonstration of competence) predicted achievement at -.14. Similar, they found that mastery approach goals of a general character (e.g., "The opportunity to do challenging work is important to me,") predicted achievement at .20 while the merged subcategory of mastery-improve (e.g., "I strive to constantly learn and improve in my courses") and mastery-task (e.g., "Understanding how to use the new technique is important to me") predicted achievement at -.10. These kinds of findings give important information about what aspects within the goals that predict various outcomes (achievement in the above example). Moreover, the results underscore once again the importance of being conscious of the construct's conceptualization, operationalization, and measurement when approaching achievement goal literature.

FURTHER DIRECTIONS

Despite decades of research on achievement goals, there are still many questions left to answer. For instance, what aspects within the performance approach goals lead to better achievement, and what processes are involved along the way? Even though this question has been asked for roughly two decades, we still do not have any clear answers. Recent studies do indicate that competitiveness (e.g., Murayama & Elliot, 2012) may play a role and, in turn, force more energy and effort from students. However the path from increased effort to good grades is still quite unclear (see e.g. Senko et al., 2011). Another question is which mechanism is involved in the goal regulation? Recent studies indicate that perceived competence moderates the relationship between the achievement approach goal and performance avoidance

goals (Law, Elliot, & Murayama, 2012; Linnenbrink-Garcia et al., 2012). The correlation between these goals seems to be less when perceived competence is high. This may strengthen the hypothesis that suggests that various goal types can be regulated independently of each other. Given that goal regulation is a consequence of both individual and environmental factors, as well as interactions between the these factors (Bandura, 1986), more intensive longitudinal studies along with experimental studies are needed to answer such a question.

Another topic for further research is to examine the value of achievement goals in new contexts. In addition to the student learning context, there are similar studies conducted in domains such as sport (Duda & Nicholls, 1992; Ommundsen & Pedersen, 1999; Ommundsen & Roberts, 1996; Ommundsen, Roberts, Lemyre, & Miller, 2005) and teaching (Butler, 2007; Butler & Shibaz, 2008; Retelsdorf, Butler, Streblow, & Schiefele, 2010; Retelsdorf & Günther, 2011); however, there may be more contexts within which achievement theory can be a useful and valuable tool for reflection. For instance, in light of the increasing focus on the accountability of school leaders (Elstad, 2009; O'Donnell & White, 2005; Tucker & Codding, 2002), and that stakeholders are now more likely to evaluate principals' proficiency in relation to student achievement scores on assessment programs such as PISA and national tests, the achievement goals theory may be a fruitful approach to the study of educational leadership.

A final remark with regard to future direction concerns teachers' competence in motivation. In the Nordic countries, few teachers are educated on theories about motivation and most teachers therefore have only a very general conception of motivation. Even if many teachers are working well with students' motivation in class based on common sense theories and their own experiences, further insight into related scientific theories could perhaps help them understand the complexity of students' motivation and further help them work more systematically. Together with self-efficacy theory and expectancy-value theories, achievement goal theory should be incorporated into teacher education.

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3. ACHIEVEMENT MOTIVES AND ACHIEVEMENT GOAL-TYPE FOCUS

Their Relationship to Important Outcomes in the Classroom

INTRODUCTION

Two of the most important constructs in research on achievement motivation in educational contexts are achievement goals and achievement motives. Investigating the relationships between the two constructs is essential to providing constructive input to teachers regarding the creation of an optimal achievement climate. In this chapter I will present the theoretical framework and results of four experiments that examined the main and interaction effects of motives and achievement goal-type situations on performance, motivation, and affects in classrooms settings.

Achievement motives include the motive to approach success (M_s) and the motive to avoid failure (M_f). Achievement motives are defined as capacities to anticipate rewarding goal states (hope) or threatening goal states (fear) in achievement situations. It is assumed that individuals possess these motives to a varying degree. The function of the anticipated affect-based goal states is to select, orientate, and energize the behavior of the individual (McClelland, 1987). In order to predict performance and learning outcomes in the classroom, however, it is vital to distinguish between motives and motivation (Atkinson, 1964; McClelland, 1985): the former refers to a personality characteristic which may or may not manifest itself in a particular situation, while the latter refers to the manifestation of a characteristic in a specific situation (i.e., an aroused motive). Therefore, identifying the type of environment that stimulates the activation of the motives is important for academic outcomes. In Atkinson's risk-taking model (1957), the strength of the motives and two situational components, subjective probability of success/failure (P_s or P_f) and the value of success/failure (the incentive value, I_s or I_f), are determinants for the level of motivation. In situations that represent a challenge to achieving success and/or pose a threat of failure, the resultant approach or avoidance motivation will be maximized. A classroom setting is an important arena for the display of achievement-related activities where performance is evaluated and where pupils face the challenge of success as well as the threat of failure. It should therefore be a potential activator of both motives. Accordingly, in these types of settings, motives may play a key role in pupil performance. Moreover, the activation of motives has been shown to vary depending on the features of the current motivational climate in

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the classroom (e.g., Nygård, 1975; Rheinberg, Vollmeyer & Burns, 2000). Earlier studies suggest that the type of reference norms or the achievement goal-type focus may be one of these features (Barron & Harackiewicz, 2001; Heckhausen, 1977) and goal distance in time another (Gjesme, 1981). Another crucial question is whether the achievement goal-type focus or the distance to the goal in time activates the motive to achieve success and the motive to avoid failure in different ways.

The motives may also guide voluntary goal-setting (i.e., the adoption of personal achievement goals). In classical motivation theory, achievement motivation (i.e., the result of activation of the motives) is defined as the striving to meet a standard of excellence (e.g., Heckhausen, 1967; McClelland et al., 1953). However, these authors did not specify which standards the motivated individual used to evaluate an action outcome or which type of goal they set and strived to achieve. H. Heckhausen (1974) was probably the first to systematically link reference norms to activation of motives. The reference norms comprise an individual reference norm and a social reference norm. With regard to the individual reference norm, an actual performance is evaluated by comparing it with previous performances. With regard to the social reference norm, an actual performance is evaluated by comparing it to the performances of others. In a more recent hierarchical motivation model (Elliot, 1997, 1999; Elliot & Church, 1997), the broad achievement motives are located at the top in terms of energizing achievement-related behavior. The achievement goals – defined as the motivational purpose of engagement in more situation-specific tasks – are in an intermediate position, giving direction to the achievement-related behavior. As conceptualized by Thrash and Elliot (2001), the mastery goals are goals in which one seeks competence as defined by the task or one's own performance history (i.e., employs an individual reference norm), whereas performance goals are those in which one seeks to perform competently relative to others (i.e., employs a social reference norm). The achievement-related outcomes are at the bottom of the hierarchical motivation model. For example, the adoption of achievement goals is believed to stem from the motive to achieve success and the motive to avoid failure and to lead to achievement-related outcomes such as intrinsic motivation and graded performance.

In this chapter I will present the theoretical framework and results of four experiments that examined the main and interaction effects of motives and different achievement goal situations in the classroom. In two of the experiments, focus was placed on the types of achievement goals. In the other two, the distance to a goal in time was induced. The pupils' motive dispositions were assessed in a session preceding all four experimental procedures. Before starting work on selected tasks, but after having received instructions, pupils in three of the experiments also answered questions about their personal achievement goals (experiment three), and their approach and avoidance motivation (experiments two and four). I will start by reviewing relevant research and theories, the latter forming the basis for the experimental tests, the findings of which will be discussed in light of motivational theory. I will also briefly discuss the importance of distance to a goal in time, as that is the manipulated goal situation in two of the studies.

ACHIEVEMENT MOTIVES

According to Atkinson's (1964) theory of achievement motivation, the motive to achieve success is a relatively stable disposition within the individual, and involves striving to approach a certain class of positive incentives (goals) or avoiding a certain class of negative incentives (threats). The anticipation of failure as a possible outcome of an achievement task arouses the latent motive to avoid failure (M_f). The anticipation of success arouses the latent need for achievement or the motive to approach success (M_s). This implies that in achievement situations two motivational tendencies are situationally stimulated: an approach tendency that instigates actions directed at achieving success (approach motivation) and an avoidance tendency that directs the individual's behavior away from the achievement task and the possibility of failure (avoidance motivation). The strength of the motives differs from one individual to another, which affects how many situations the individual perceives as relevant for motive satisfaction and how strong the anticipated affect is for goal attainment (Atkinson, 1957). It is important to note that motives predict academic performance only in the presence of appropriate incentives. According to Atkinson (1964), motives, expectancies, and incentives combine to produce goal-seeking. The most well-known example is that when expectancy of success is at an intermediate level, both achievement motives are strongly activated and the differences in strength of the motives are maximized (Gjesme, 1983a). If there are no achievement incentives in the given situation or the task appears to be either extremely difficult or very easy, there is no reason to believe that individuals high in the motive to approach success or the motive to avoid failure will behave differently from those low in the achievement motives (Spangler, 1992). One example of an achievement incentive is the achievement goal-type situation in the classroom.

ACHIEVEMENT GOALS

Teachers commonly employ goals as a strategy to motivate their pupils in the classroom. For instance, a teacher may tell his or her pupils prior to a problem-solving session that most pupils have a fairly similar ability to solve problems but that some stand out because they do it exceptionally well. Thus, the problem-solving session will provide the opportunity for pupils to demonstrate that they are exceptional problem-solvers (i.e., a performance-approach goal-type focus). The type of academic goals pursued by pupils is, together with the motives, considered one of the most essential variables in motivational research in educational contexts (Bjørnebekk, 2008; Elliot, 1999). The personal achievement goals adopted by pupils and the activation of achievement motives in the classroom are believed to be influenced by the goal message (e.g., the achievement goal-type focus or the distance to goal in time) disseminated in the achievement context (Ames, 1992). There may be many different goal foci or messages, but the two that are always represented in the achievement goal theories are mastery and performance goals

(Ames & Archer, 1988). The performance goal group encompasses individuals who exhibit their own abilities and try to perform better – or at least no worse – than others (Elliott & Dweck, 1988). The mastery goal group encompasses individuals who focus on developing competence or attaining task mastery (Elliot & Harackiewicz, 1996). Researchers in achievement goal theory generally associate performance goals with a number of negative processes and consequences. For example, it is assumed that if a person whose feeling of competence is low sets a performance goal he or she will give up more easily in the face of difficulty (Dweck, 1986) or in situations in which he or she has experienced little success (Nicholls, 1989), and will also have a tendency to use approaches that promote surface processing of the material, such as rehearsal strategies (Nolen, 1988). Conversely, mastery goals are viewed as linked to a number of positive processes and consequences. It is assumed that a person who has set a mastery goal will show considerable perseverance when encountering opposition (Dweck & Leggett, 1988), seek out optimal challenges (Dweck, 1986), and use strategies that promote deeper processing of the material (Ames, 1984). However, owing to inconsistent evidence about the relationships between performance goals and performance outcomes, a trichotomous model that differentiates between performance approach, performance avoidance and mastery goal orientation has been proposed (Elliot, 1997). Each of the three achievement goals has been shown to be related to emotional processes and to performance. According to Tyson, Linnenbrink-Garcia and Hill's review (2009), adoption of performance-avoidance goals is associated with lower achievement and outcomes related to activation of avoidance motivation (e.g., anxiety, helplessness, and shame). Furthermore, 40 % of the correlations showed a positive association between adoption of mastery goals and achievement and between adoption of performance-approach goals and achievement. Only adoption of mastery goals, however, appears to be consistently associated with high subjective well-being and the activation of positive affects. More recently, a 2x2 framework grounded in both the mastery-performance distinction and the distinction between approach goals and avoidance goals has been addressed (Bjørnebekk & Diseth, 2010; Elliot & McGregor, 2001). Much of the previous work in this tradition has focused on students' personal achievement goals (e.g., Dweck, 1986) or students' perceptions of the motivational climate (e.g., Roeser, Midgley & Urdan, 1996). Recently, however, an instructional experiment conducted by Rheinberg and Krug (2005) indicated that individual reference norms enhance motivation to learn (approach motivation). Likewise, the findings from Krampen's study from 1987 indicate that classrooms characterized by mastery goal-type focus show higher levels of activation of the motive to approach success, willingness to exert effort and student responsibility than those that do not. Moreover, the expectancies and performance of weaker students were much higher when feedback was based on individual reference norms than on social reference norms.

ACHIEVEMENT GOAL FOCUS AND ACTIVATION OF MOTIVES

According to Atkinson's theory (1964), activation of achievement motives depends on their strength and the probability of success. Both the performance focus and the mastery focus make competence salient and thereby facilitate the activation of the motives. In Atkinson and Reitman's early experiment (1956), the motive to achieve success was positively related to performance in an individual reference norm condition. However, in a condition where the person having the highest score was awarded a prize (i.e., a performance goal-type situation) there was no relationship between the motive to achieve success and performance. Achievement goals reflect normative standards for performance (e.g., performance goals) or are based on task characteristics and personal improvement (e.g., mastery goals), and these foci may activate the motive to achieve success and the motive to avoid failure in different ways. According to Dweck (1986), performance goals may evoke evaluation anxiety (e.g., state test anxiety) and disrupt task involvement, whereas mastery goals may promote task involvement (e.g., satisfaction during problem-solving) because they highlight self-referential evaluation and ongoing improvement. Also, recent US studies have tested out the hypothesis that the motivational outcome of achievement goals can be differentiated according to individual differences in motives. Experiments on intrinsic motivation indicate that individuals low in the motive to achieve success respond most positively to assigned mastery focus (Durik & Harackiewicz, 2003; Elliot & Harackiewicz, 1994; Harackiewicz & Elliot, 1993), whereas those high in the motive to achieve success respond optimally to performance goals or simply enjoy solving tasks regardless of goal focus (Durik & Harackiewicz, 2003; Elliot & Harackiewicz, 1994). A clear understanding of the effects of achievement goal-type situations on motivational outcomes such as performance and academic emotions may require an investigation of motives as moderators of the effects of goal-type focus. Surprisingly, it appears that few published studies have examined the relationship between motives and motivational outcomes with different goal-type focus in classroom settings (Bjørnebekk, Gjesme & Ulriksen, 2011). If the relationship between individual differences in motives and assigned goal focus could be measured, it would be a valuable addition to the existing literature and could promote further research on the development of such relationships.

ACTIVATION OF MOTIVES AND ADOPTION OF ACHIEVEMENT GOALS

In Elliot and his colleagues' hierarchical model, the motives are presumed to energize behavior, but do not provide specific guidelines for how an individual can achieve the motive that has been activated (Elliot & Thrash, 2001). Thrash and Elliot (2002) have found that individuals high in the motive to achieve success tend to pursue mastery goals, whereas individuals high in the motive to avoid failure pursue both performance-approach and performance-avoidance goals. This finding corresponds

with the relationship between the motive to approach success and preference for an individual reference norm identified in Rheinberg, Duscha and Mishels' study from 1980. Moreover, according to Brunstein and H. Heckhausen (2008), pupils high in fear of failure are hounded by concerns about the social evaluation of their achievements and its implications and about being dependent on the recognition of others. For them, the striving to achieve is a means to the end of gaining the acceptance and appreciation of the social environment. The high fear of failure group should therefore be expected to be more performance-orientated (both approach and avoidance). Moreover, the performance outcome for the group that enters into the situation with high fear of failure and adopts performance goals may be moderated in situations with performance goal-type focus by emotion regulation and metacognitive self-monitoring (Tyson et al., 2009). Conversely, the findings from Brunstein and Hoyer (2002) indicate that individuals high in the motive to approach success for the most part ignore feedback about how well they are doing relative to the performance of others (i.e., performance goals). In contrast to the results from the US studies, these findings indicate that the high motive to achieve success group would be expected to adopt mastery-approach goals and experience the highest activation of motives in mastery goal-type situations.

DISTANCE TO GOAL IN TIME AND ACTIVATION OF MOTIVES

Time is a critical component of motivated behavior, and several theories on the effect of time on behavior have been developed (e.g., Ainslie, 1992; Trope & Liberman, 2003). A key concept shared by the various theories is that the value of outcomes is diminished as the distance to the goal increases (Ainslie & Haslam, 1992; Gjesme, 1996). Motives are viewed as capacities to anticipate pleasure and pain, respectively, in achievement situations. Since they are *directed toward future achievement goals and activities* it may be assumed that the performance of individuals high in the motive to achieve success (M_s) will increase as a distant goal approaches in time. There is also evidence that repeated and exaggerated concern and worry about the future, as is the case with individuals high in the motive to avoid failure (M_f), may not be beneficial to problem-solving. Instead, it may lead to high stress, cognitive interference, and preoccupation. In such cases, a decrease in the temporal distance to goal may lead to an inability to cope with problems. Indeed, studies indicate that the proximity of a goal, defined in terms of distance in time, accentuates the positive effect of the motive to achieve success (M_s) and the negative effect of the motive to avoid failure (M_f) on present performance (Gjesme, 1974; Halvari, 1991).

Results of the Four Experiments, and Discussion

Experimental manipulation of the classroom goal structure provides the greatest insight into how different achievement goal-type situations can alter the motivation, performance, and academic emotions of pupils. Research using experimental

manipulation of classroom goals and their results is, however, limited (e.g., Linnenbrink, 2004). The objective of two of our experimental studies (Bjørnebekk, Gjesme, & Ulriksen, 2011) was to shed light on the influence of achievement motives on performance and satisfaction in various achievement goal-type situations. In the first study, based on 314 sixth-graders, two types of goal situations were induced: performance and mastery. The goal types were examined with regard to motive dispositions as antecedents and several consequences (e.g., performance, satisfaction, pleasant affect, worry, and emotionality). In the second study, based on 331 sixth-graders, three types of goal situations were induced: performance-approach, performance-avoidance and mastery goals. In this study, the objective was to extend the two goal-type conditions with a performance-avoidance condition and, additionally, to investigate vital antecedents and consequences of approach motivation (T_s) and avoidance motivation (T_f) on performance.

The results of the first experiment revealed that the motive to achieve success (M_s) produced positive effects, satisfaction, and increased performance, whereas the motive to avoid failure (M_f) led to worries and performance reduction. Furthermore, the results indicated that the goal-type focus can both undermine and enhance satisfaction during problem-solving. In line with earlier studies, it was found that a mastery goal focus has a more positive effect on satisfaction during problem-solving than a performance goal focus. Several significant Person x Situation interactions were also revealed. Consistent with the results of Harackiewicz and her colleagues (Elliot & Harackiewicz, 1994; Harackiewicz & Elliot, 1993; Senko & Harackiewicz, 2005), the results indicated that mastery emphasis leads to higher satisfaction during problem-solving for individuals low in the motive to achieve success than performance emphasis does.

A limitation of the first experiment was that there was no performance-avoidance group. Furthermore, the achievement goal manipulation was perhaps simply too mild to produce the effects that others have found. Some of these shortcomings were addressed in the second study. The most important single factor for pupil's performance in the second goal-type experiment was the motive to approach success and the mastery goal-type situation. In addition, the pupils high in the motive to achieve success performed better under the mastery condition than under the performance condition. It was also noted that the pupils high in both the motive to achieve success and the motive to avoid failure ("the perfectionists") exhibited significantly higher performance in the performance-approach condition compared to the performance-avoidance condition. Finally, the performance-avoidance goal situation accentuated the negative effects of high fear of failure on performance. Conversely, the performance scores for the success-orientated pupils (those high in M_s – low in M_f) increased in the performance-avoidance condition compared to the performance-approach condition. Hence, an avoidance-goal situation may be good for some pupils' performance. In general, however, an avoidance-goal situation appears to accentuate the negative effects of a high avoidance motive (M_f) on performance. As expected, when the achievement situations activated the motives,

the motive to achieve success (M_s) and the motive to avoid failure (M_f) played a major role in relation to approach (T_s) and avoidance motivation (T_f), respectively. The performance-approach participants scored higher on approach motivation (T_s) than the performance-avoidance participants. No significant difference in approach motivation (T_s) between performance and mastery participants was observed. With regard to avoidance motivation (T_f), pupils low in the motive to approach success increased their avoidance scores from the mastery to the performance-goal condition. Moreover, in the second study, avoidance motivation was validated as a mediator of the relationship between the motive to avoid failure and performance.

Personal Achievement Goals, Motives and Goal Distance in Time

In experiments three and four, the implications of goal distance in time on motivation-related concepts were examined. The results from the third study, based on 585 sixth-graders, revealed that both approach and avoidance motivation increased as the future goal/event approached in time (Bjørnebekk & Gjesme, 2009). This increase in approach and avoidance motivation influenced the performance level of the pupils in different ways. The level of performance level of success-orientated pupils was enhanced, while the performance level of failure-orientated pupils remained about the same.

In the fourth experiment (Bjørnebekk, 2009), the motive to avoid failure was a positive predictor of avoidance goal adoption (both performance and mastery) and a negative predictor of performance and well-being. Conversely, the motive to achieve success was a positive predictor of approach goal adoption (both performance and mastery), performance and well-being. The assumed mediation of achievement goals on the relationship between motives and performance in the hierarchical motivation model was not independently substantiated, as achievement goals did not predict performance in this study. However, in line with the hierarchical model, the relationship between performance-approach goals and performance was significant, although rather minor. A hierarchical model with mastery-approach goal adoption mediating the relationship between motive to achieve success and well-being was supported. There were also important results regarding how children's goal adoption moderates the effect of the achievement motives. They showed that adoption of mastery-approach goals was associated with increased performance only when the motive to approach success was high and the motive to avoid failure was low ("the success-orientated"). Performance-approach adoption was also related to enhanced performance in success-orientated individuals. In contrast, performance-approach goal adoption was related to a decrease in the level of performance in indifferent individuals (low M_s – low M_f). It is crucial to note that the results from this study indicate that regulation through approach goals in children appears to have no effect – or a negative effect – on motive constellations, with the exception of the success-orientated. It therefore appears that the achievement-approach goals have a similar moderating effect on the relationship between motives and performance as perceived intrinsic instrumentality has in classical motivational theory (Atkinson, 1964). In Job, Langens & Berandstätter's study from 2009, the striving for approach goals

predicted experiences of positive effect and well-being only for individuals who had a strong achievement motive (the success-orientated; high M_s – low M_f). According to the authors, the results reveal that individuals benefit from adopting goals that fit their motives. Based on the results and earlier research, it may be suggested that success-orientated children should be encouraged to adopt both types of approach goals. For indifferent children and children high in M_f, however, this strategy may have an undesirable effect.

In both of the distance to goal in time experiments, the level of performance of pupils high in the motive to achieve success increased as the goal approached in time. The performance of pupils high in the motive to avoid failure did not, however, differ significantly as a function of goal distance. A main effect of distance in time is that performance increases as physical time distance decreases. This was particularly true during the last part of the problem-solving session, when the level of performance of success-orientated pupils increased as the goal approached in time. A key concept shared by the various goal distances in time to goal theories is that the value of outcomes is diminished as the distance in time from the outcomes increases (e.g., Ainslie & Haslam, 1992; Gjesme, 1981). For the success-orientated pupils the results therefore strongly support Atkinson's achievement motivation theory, in which the value of success/failure is an important determinant for the level of motivation.

However, it was particularly during the first part of the problem-solving session that these pupils showed higher mean performance than the conflict-orientated pupils ("the perfectionists"; high M_s – high M_f) and the indifferent-orientated pupils (low M_s – low M_f) when the distance to goal was one week or more. Success-orientated pupils also showed a decrease in approach motivation in the one–year-to-goal condition. Failure-orientated pupils, however, demonstrated an unexpected increase in performance during the last part of the problem-solving session as the goal approached in time. The fact that avoidance motivation only had a significant impact on performance during the first part of the problem-solving session is noteworthy. This relationship may be related to pupils' use of emotion regulation strategies or that the pupils' mastery of some of first tasks decreased their worries investigating the processes behind this would be a promising topic for future research studies.

IMPLICATIONS FOR THE CLASSROOM AND LEARNING

It follows from the results of the experiments and the theories presented in this chapter that when analyzing a pupil's learning and performance processes a more precise account can be obtained by integrating motives, personal achievement goals, and the achievement goal-type situation (i.e., goal-type focus or distance to goal in time) rather than directing attention toward only one of these factors. Such integration also has implications for educational practice. During the forethought phase, the choice of an effective goal and strategy appears to be dependent on the pupils' motive disposition. The following factors are likely to enhance the

performance of and minimize avoidance motivation in pupils with high scores on the motive to avoid failure (high M_f): slow progression, with sufficient time and instruction to learn the material thoroughly and low orientation toward the future (e.g., long distance to goal in time), mastery goal-type focus, focus on earlier positive experiences, use of well-learned strategies, low focus on adoption of personal achievement goals, presentation of learning material in a logical sequence, and tasks with low perceived instrumentality and importance. This is particularly true for individuals who are high in the motive to avoid failure and low in the motive to achieve success ("the failure-orientated"). The following factors are likely to enhance the performance of and augment approach motivation in pupils with high scores on the motive to achieve success (high M_s): focus on personal adoption of both performance-approach and mastery-approach goals, situation with mastery goal-type focus, tasks with high perceived instrumentality and importance, focus on improvement, challenging tasks, and tasks requiring the use of new strategies. During the performance phase, students with a failure orientation may experience improved performance by working on easy tasks and using several self-control strategies, such as attention-focusing, self-instruction, imagery and metacognitive self-monitoring to suppress or dispel worries. However, the use of self-control and metacognitive strategies to inhibit or remove affect may have a negative effect on the performance of success-orientated students. They may need to utilize metacognitive strategies to test their use of cognitive learning strategies and self-recording and optimize their functioning. They should utilize self-control strategies to control and guide their approach motivation, rather than to remove affect. During the self-reflection phase, students with a failure orientation may need help to achieve realistic self-evaluation and causal attribution. They may also need help to correct defensive reactions and affect. Meanwhile, students with a success orientation may need to set new, challenging self-improvement and social comparison criteria to activate new approach motivation and further improve their performance.

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4. COMPREHENDING MULTIPLE TEXTS

Theories, Components, and Competence

INTRODUCTION

In their academic lives, students are commonly invited to make use of multiple texts when carrying out assignments, such as project work. Also during leisure time, students may typically encounter conflicting information, in the form of websites, articles, blogs, advertisements and social media. The rise in active Internet users has contributed to an ostensibly ever-expanding body of expository texts that are readily available to students (Goldman, Braasch, Wiley, Graesser, & Brodowinska, 2012). Due to the ease with which laypersons can publish on the Internet, readers may commonly meet multiple texts authored by contributors from various backgrounds, each with different knowledge, perspectives, and agendas (Britt & Rouet, 2012). Instead of meeting single carefully-edited, well-organized, reliable, and linear texts selected by a teacher, students may encounter multiple texts of varying degrees of reliability, with more or less salient information about the source of the text. When viewed as a whole, these texts will typically contain some unique and some overlapping information, as well as some consistent and some conflicting information. Thus, readers are required to take on the roles of editor-in-chief and gatekeeper when deciding what information to rely on if they are to build a balanced account of a given situation (Perfetti, 2006). In order to fulfill these roles successfully students must be able to strategically evaluate the various perspectives described in the texts, evidence should be contemplated, and its veracity judged on sound grounds.

The main body of research addressing text comprehension is based on single-text reading. Although there are substantial similarities between single- and multiple-text comprehension, several important distinctions should be noted. In this chapter we will highlight differences between single- and multiple- text comprehension, before focusing on the importance of strategic-processing and epistemic beliefs for multiple-text reading, by reviewing some of our recent work.

SINGLE- AND MULTIPLE-TEXT READING: SIMILARITIES AND DIFFERENCES

Single-text comprehension has been a recognized field of research, at least, since the early 1960s (Venezky, 1984), while systematic investigation of the processes related to multiple-text comprehension did not begin until the late 1990s (Bråten,

E. Bjørnestad & J. Heldal Stray (Eds.), New Voices in Norwegian Educational Research, 39–51.

Britt, Strømsø, & Rouet, 2011). Kintsch's Construction-Integration Model (Kintsch, 1988, 1998) is viewed as the most influential model of single-text comprehension in educational psychology (Graesser, 2007), due to its ability to account for current empirical findings. In essence, Kintsch's C-I model assumes that during reading, a text's meaning is mentally represented by a *textbase* and a *situation model*. While the textbase represents the internal meaning of the text, the situation model goes deeper and represents an interpretation of the situation described in the text, based on an integration of the text-internal meaning and relevant prior knowledge. The Construction-Integration (C-I) model also provides the foundation for contemporary models of multiple-text comprehension.

The documents model, an explicit extension of the C-I model, was originally proposed by Britt and colleagues (Britt et al., 1999; Perfetti et al., 1999) to describe the mental representations that likely result when good learners deal with challenging literacy tasks. The model was later elaborated by Rouet (2006) and, most recently, revised and discussed in relation to documents concerning scientific issues (Britt & Rouet, 2012; Bråten et al., 2011). Although several other disciplinary perspectives have made important contributions in explaining processes involved in comprehension of multiple texts, the documents model currently enjoys supremacy in an educational psychology perspective of multiple-text comprehension (Bråten et al., 2011).

In addition to the mental representations outlined in the C-I model (Kintsch, 1988, 1998), two additional representations are required to describe the comprehension of multiple documents—the *intertext model* and the *mental model* (Britt & Rouet, 2012). These two models can be regarded as subcomponents of a skillful readers' documents model. Essentially, the *intertext model* represents information about the sources themselves, including a "node" for each source that contains information about its author (e.g., motives, qualifications), form (e.g., type, date), setting (e.g., place, culture), and rhetorical goals (e.g., intent, audience). In the intertext model, source nodes are connected to document content, indicating, for example, that the reader remembers that a particular claim (content) was set forth by a particular author (source). In addition, source nodes are connected to each other through predicates such as "agrees with", "supports", or "opposes" (Britt et al., 1999; Perfetti et al., 1999). Presumably, these two types of intertext links (i.e., source-content and source-source links, respectively) make it possible to maintain a global, coherent understanding of an issue when conflicting claims or perspectives are presented in different documents.

In situations where a reader encounters multiple documents containing conflicting information, an understanding of the fact that different authors may hold opposing perspectives and have different motives for writing (e.g., education vs. marketing), as well as possessing knowledge about different forms of sources (e.g., textbook vs. advertisement) enable the reader to accommodate the perspectives in his or her global understanding of the issue (Bråten, Strømsø, & Britt, 2009). The *mental model* refers to an internal representation that combines or integrates semantic

content across documents, for example, a coherent interpretation of a historical event described from different perspectives or a global, overarching understanding of a controversial scientific issue based on the reading of conflicting documents, and is typically organized around an argument schema (Bråten et al., 2011a).

The remainder of this chapter will focus on two important facets of multiple-text comprehension that have been central in our research over the last few years; strategic processing and epistemic beliefs.

STRATEGIC PROCESSING OF MULTIPLE-TEXTS

Strategic reading involves conscious planning in the form of reader attention and resources focusing on the goal of constructing meaning (Afflerbach & Cho, 2009). More specifically, text comprehension strategies may be defined as intentional attempts to control and modify meaning construction during text reading (c.f., Afflerbach, Pearson, & Paris, 2008). Hence, strategies are cognitive operations over and above the processes that are a natural consequence of carrying out a reading task (Pressley & Hilden, 2006). The beneficial influence of strategic processing on text comprehension has been demonstrated numerous times within the single text paradigm (Dinsmore & Alexander, 2012), with pioneer studies dating back to the 1920's (e.g., Neal & Foster, 1926).

Thus, regarding individuals facing the challenging endeavor of comprehending multiple, sometimes conflicting documents, strategic reading seems particularly pertinent. Examples of multiple-text comprehension strategies include activating knowledge acquired in previous readings to augment comprehension of the current text; perceiving that multiple texts related to the same topic can provide diverse views about the topic, complementary information about the topic, or both; and judging usefulness of information provided by a single text in relation to other texts (Afflerbach & Cho, 2009). When the documents contain a high amount of semantic overlap, automatic bottom-up processes may drive integration of the content from the different documents; otherwise, top-down strategic activity seems to be a prerequisite for integration of information from multiple documents (Kurby, Britt, & Magliano, 2005).

In an authentic reading situation involving multiple sources (e.g., an undergraduate preparing for an end of semester exam) documents rarely include explicit intertextual citations telling the reader how s/he should connect the different documents to make an integrated representation of the issue in question, this job has to be done by reader. For example, Bråten and Strømsø (2011) found that undergraduates who focused on strategies for accumulating as many pieces of information as possible from the different documents (e.g., try to remember as much factual information as possible from the texts) were more likely to display poor intertextual comprehension, whereas participants using strategies to elaborate on the information by comparing, contrasting, and integrating contents across documents were more likely to display good intertextual comprehension after reading a set of

conflicting documents about the causes of climate change. Corroborating this, in a study where Hagen, Braasch, and Bråten (in press) instructed undergraduates to read multiple texts for the purpose of constructing a written argument, the researchers found that undergraduates who were better comprehenders took notes that reflected elaborative integration of contents both within and across documents, whereas poorer comprehenders took notes paraphrasing pieces of factual information from single documents. Multiple-documents comprehension, therefore, seems to require deliberate, goal-directed attentional, transformative, and integrative processing. However, there is a substantial body of research documenting that the strategic skills needed in such a reading task is far from cognitive freeware and may be challenging for many students.

Strategic Reading of Multiple Texts – A Challenging Reading Task

Wineburg's (1991) landmark study is considered the first empirical investigation into strategic reading related to multiple documents. In this think-aloud study, expert readers (historians) demonstrated reliance on *corroboration strategies* to compare content across documents and examine potential discrepancies among them, *contextualization strategies* to situate document content in a broad spatial-temporal context, and *sourcing strategies* to note and use information about the author, document type, and place and date of document creation. But, whereas Weinburg reported that historians used these three comprehension strategies, as well as paying close attention to source information; high-school students reading the same documents typically ignored source information. Moreover, the few students that noticed discrepancies among the different sources had difficulty resolving them. More recently, Maggioni and Fox (2009) analyzed the think-aloud protocols of high-school students reading multiple history documents, and found that students often treated the different documents as if they were the paragraphs of a single document and extracted pieces of information from each of them. Moreover, the students in this study also failed to check the source information of the documents, in essence treating them as authorless. Thus, the students neither evaluated the trustworthiness of the sources, nor their contents, in light of source information. In fact, more than half of the students explicitly stated that using source information for interpretative or evaluative purposes was not helpful.

Strategic Reading of Multiple Documents – Our Current Work

In two recent studies, Anmarkrud and colleagues (Anmarkrud, Bråten, & Strømsø, in press; Anmarkrud, McCrudden, Bråten, & Strømsø, in press) used think-aloud methodology (i.e., written transcriptions of students' moment-to-moment verbalizations as they worked with a given task) to examine strategic reading of multiple texts among undergraduates reading conflicting documents about the controversial issue of potential health risks of cell phone use. In the first

study (Anmarkrud, Bråten, & Strømsø, in press), the main aim was to explore if students' spontaneous strategic reading behaviors could be categorized into the broader categories of strategic reading behavior proposed by Afflerbach and Cho (2009) on the basis of their extensive review of the literature, and then examine if/how reading behaviors falling into these categories were related to multiple-text comprehension. Findings indicated that students' strategic reading behaviors could be categorized in Afflerbach and Cho's (2009) three main categories; strategies for identifying and learning important information, strategies for comprehension monitoring, and strategies for evaluating and interpreting text content. Moreover, the findings also indicated that students' strategic processing during reading was related to their multiple-text comprehension, measured by the quality of an essay where the participants were asked to judge the health risk of cell phone use. As expected, students' use of cross-document linking strategies while reading, was positively related to their tendency to display integrative argumentative reasoning that discussed opposing perspectives and the unsettled nature of the issue in an elaborative way (i.e., by means of argument schema components). Moreover, the findings indicated that use of monitoring and evaluation strategies was also positively related to participants' argumentative reasoning.

The second study (Anmarkrud, McCrudden, Bråten, & Strømsø, in press) explored if/how undergraduates' use of multiple-text comprehension strategies was related to their judgments of text relevance. First, the study investigated whether undergraduates were able to discriminate between more- and less-relevant information in multiple-texts. Second, whether students' strategy use differed while they read more- and less-relevant information. And third, whether readers' relevance judgments and strategy use while reading were related to multiple-text comprehension (measured by post-reading essays). Results of analyses of the think-alouds indicated that participants were able to discriminate between relevant and less-relevant information while reading multiple-texts. More importantly, findings indicated that there were substantial differences in how the readers processed more- and less-relevant information in the documents. For example, readers were more inclined to link more-relevant information to content from other documents, compared to when reading less-relevant information. Finally, the results indicated that both accurate judgments of text relevance and strategic processing were significantly related to multiple-text comprehension. Readers who were able to distinguish between less- and more-relevant information in the texts, and then strategically connect the most-relevant information to the other texts were more likely to display integrative argumentative reasoning that discussed opposing perspectives and the unsettled nature of the issue in an elaborated way.

Using a computer based methodology to study reading processes, Bråten, Ferguson, Anmarkrud, and Strømsø (2013) examined strategic reading of multiple-texts in a sample of 65 students from lower secondary school (10th grade). Participants read five science texts presenting opposing views on the relationship between sun exposure and health on a computer screen using the application Read&Answer

2.0 (Vidal-Abarca et al., 2011). In this application, each text was presented on a separate page. One whole page was visible, but masked, at any given time, except a single segment as selected by the reader. The application thus records participants' navigation back and forth, within and across the different texts, also giving the exact time spent on each of the text segments. Based on the data from Read&Answer, reading patterns were analyzed with respect to the degree of non-linear reading behavior. Thus, reading was categorized as linear multiple-text reading when each text was read in the order it was presented and no backtracking (e.g., going back and rereading parts of previously read texts) occurred during the session. Reading was categorized as *moderately non-linear multiple-text reading* when at least one but not more than four episodes of backtracking to segments in previously read texts occurred. Finally, reading was categorized as *non-linear multiple-text reading* when backtracking to segments in previously read texts was observed at least five times during the session. Students' multiple-text comprehension was measured by means of a composite score aggregated from three short-essay tasks that each required students to integrate and reconcile the opposing perspectives presented in the texts. A hierarchical regression analysis showed that strategic reading pattern was a strong and unique predictor for multiple-text comprehension even when controlling for variance from important predictor variables such as pre-reading topic knowledge, word recognition, science reading task value, and science reading self-efficacy.

In summary, these three empirical studies of students' strategic reading of multiple science texts demonstrate that the more carefully readers monitor and elaborate their emerging understanding of the issue in question, by contrasting and corroborating across different texts, the more likely they will succeed in bridging opposing perspectives into an integrated understanding of the issue they read about. However, skilled reading of multiple texts draws on more than strategic competence. We now turn our attention to another area that has been important in our research on students' reading of multiple texts, that is research about students' personal theories of knowledge and knowing (epistemic beliefs).

BELIEFS ABOUT KNOWLEDGE AND KNOWING

In philosophy, *epistemology* refers to the study of theoretical and definitional matters of knowledge, such as, what counts as evidence and on what bases beliefs can justifiably be called knowledge (Plotkin, 1994). In educational psychology, *personal epistemology* refers to the overarching study of individuals' views and understanding of knowledge and knowing. Further, *epistemic beliefs* describe personal views or theories that individuals hold about knowledge and knowing (Hofer & Pintrich, 1997) and *epistemic cognition* refers to the process of enacting these beliefs in defining, acquiring and using knowledge (Ferguson, Bråten, & Strømsø, 2012).

It is now commonly assumed that epistemic belief development begins in childhood and continues throughout adult life (Wildenger, Hofer, & Burr, 2010), with absolute views giving way to multiplistic (nothing is certain and everyone's

views are equal), and eventually evaluativistic views of knowledge (acknowledging the need to justify knowledge claims in light of supporting evidence and existing theories) (Kuhn, Cheney, & Weinstock, 2000). Furthermore, epistemic beliefs have been shown to exist at different levels of specificity, from beliefs about knowledge and knowing at a domain-general level (Perry, 1970), to domain-specific beliefs, for example, beliefs about history or science (Stahl & Bromme, 2007), and even topic-specific beliefs, like beliefs about knowledge and knowing about climate change (Bråten & Strømsø, 2010).

An influential model of personal epistemology in educational psychology has been forwarded by Hofer and Pintrich (1997), who proposed that beliefs about knowledge and knowing, can be divided into four separate dimensions that can each be described in terms of a continuum of beliefs. The first two dimensions concern beliefs about knowledge, that is, the *certainty* and *simplicity* of knowledge. The certainty dimension ranges from viewing knowledge as absolute and unchanging to viewing knowledge as tentative and evolving, and the simplicity dimension ranges from viewing knowledge as consisting of an accumulation of isolated facts to viewing knowledge as consisting of highly interrelated concepts. The third and fourth dimensions concern beliefs about the nature of knowing, and are made up of beliefs about *source* and *justification* for knowing. The source of knowledge dimension ranges from conceiving knowledge as originating outside the self and residing in external authority, from which it may be transmitted to the knower, to conceiving knowledge as actively constructed by the person, and the justification for knowing dimension varies from justification through observation and authority, or on the basis of what feels right, to the use of rules of inquiry and the evaluation and integration of different sources.

However, not everyone applauds this conceptualization and studies that have tried to capture all four dimensions using factor analysis have not always been successful (Hofer, 2000). Inspired by earlier research focusing on the development and the nature of epistemic beliefs, as well as philosophical considerations of epistemology, Greene and colleagues (Greene, Azevedo, & Torney-Purta, 2008) argued that justification for knowing is the only dimension that deserves to be labeled epistemic, whereas, the certainty and simplicity of knowledge are, according to Greene and colleagues, ontological considerations. Thus, they propose that justification for knowing should be captured by more than one dimension, representing the different ways that individuals try to verify knowledge claims, those being *personal justification* (i.e., by personal means), and *justification by authority* (i.e., by external sources); and further, that ontological beliefs, about the nature of knowledge, should be represented by a single dimension, namely *certainty/simplicity*.

Application of the study of beliefs about knowledge and knowing in educational psychology is not as esoteric as it might first appear (Hofer, 2004), and the essence of this line of research can be exemplified in the following ways: First, a student, who has to complete an assignment about an historic event, like the Falklands War. A common approach would include using a search engine to locate webpages

containing keywords ("Falklands war"). If the student holds the view that knowledge is certain and simple, and there can only be one correct view about a matter, then she might be satisfied with the first result that the search engine returns, for example, a document produced by the British media. In this case, the student would fail to recognize the importance of integrating potentially conflicting views, such as the opinion of the Argentinean government or the people living in the Falklands, and may gain a particularly one-sided account. Second, imagine you have been noticing some unnerving symptoms, and a concerned friend has voiced suspicions about Bechterews syndrome, an autoimmune illness you know little about. Where do you choose to seek further information? Will you search the net, confer with a specialist, or ask a relative? And how do you decide what information to trust? If you hold a strong view of the self-constructed nature of knowing and value personal experience as a source of knowledge, then you might be more inclined to listen to a relative with a similar illness than consulting a newly educated doctor, potentially failing to learn about a new form of clinically-tested treatment. On the other hand, a strong belief in authority as a source of knowledge and valid way of justifying knowledge claims might preclude consideration of alternative treatments, for better or worse.

Epistemic Beliefs in the Context of Reading Multiple Texts – Our Current Work

In two recent studies, Ferguson and colleagues (Ferguson & Bråten, 2013; Ferguson et al., 2012) have investigated relations between multiple-text comprehension and aspects of personal epistemology, following the proposal that relations between epistemic beliefs and multiple-text reading might be bi-directional. That is, while the complex open-ended problem spaces created by having individuals work with texts that discuss a topic from several sides might be particularly suited to highlighting the tentative and relative nature of knowledge and knowing, thus encouraging development of more adaptive epistemic views; research has also demonstrated that readers that understand that knowledge evolves over time and that recognize the need to corroborate information across sources, may also be better at comprehending complex issues presented in multiple texts (Bråten et al., 2011).

Thus, in the first study (Ferguson et al., 2012), we aimed to study the construct of epistemic cognition in a multiple-text setting using think-aloud methodology. More specifically, we wanted to explore the dimensionality of epistemic cognition and a mechanism of change that might explain how epistemic beliefs develop. Undergraduates were instructed to verbalize everything they thought and did while they worked with six texts presenting conflicting views on the issue of cell phones and potential health risks. The texts represented examples of authentic materials from different sources (e.g., the National Radiation Protection Agency, a national newspaper, and a popular science magazine) that students might encounter on the Internet.

Building on the framework of Greene and colleagues (2008), analysis of the students' utterances revealed that epistemic cognition was represented by three

justification dimensions. Thus students attempted to verify knowledge claims in the texts by personal justification, for example, by appealing to internal factors such as gut-feeling or personal experience, justification by authority, such as, reliance on a reputable, external source or on scientific evidence, and justification by multiple sources, representing a reliance on cross-checking, comparing and corroborating across sources. Moreover, a single dimension concerning the certainty/ simplicity of knowledge was also identified. Thus students also considered the nature of scientific knowledge about cell phones and health risks, ranging from thinking of this knowledge as static, factual and simple, to knowledge about cell phones and health risks as dynamic, theoretical and complex. Also, components of a mechanism of change were identified. In particular, we identified utterances that represented epistemic doubt, the questioning and discrediting of one's current beliefs, and resolution strategies, such as development of new perspectives or reverting to old beliefs to overcome epistemic doubt, in the student's verbal protocols. Students who expressed epistemic doubt mostly questioned the certain and simple nature of knowledge and students who displayed resolution strategies mostly tried to justify knowledge claims in different ways.

In another study (Ferguson & Bråten, 2013), we investigated student profiles of knowledge and epistemic beliefs about the controversial issue of sun exposure and health, before and after students read multiple conflicting texts about the science topic. The first point of investigation was whether groups of students, who differed on profiles of knowledge and epistemic beliefs, also differed in their ability to comprehend multiple-texts, and second, we wanted to observe whether reading multiple texts led to changes in students' knowledge and epistemic beliefs.

Sixty-five 10th graders completed a measure of knowledge about possible health implications of sun exposure, as well as the Justification for Knowing Questionnaire (JFK-Q) that was designed to capture beliefs about justification for knowing in science, as identified by Ferguson et al. (2012). One week later, immediately after reading five texts containing different perspectives about the possible health implications of sun exposure, the lower-secondary students completed three open-ended short essay questions that assessed the degree to which they managed to integrate the different perspectives on the controversial science issue presented in the texts, then retook the knowledge test and Justification for Knowing questionnaire.

Using cluster-analysis, a person-centered approach used to identify groups of students on the basis of given variables (in this case knowledge and epistemic beliefs), Ferguson and Bråten identified subgroups of students characterized by relatively high levels of knowledge combined with relatively low beliefs in personal justification of knowledge claims, as well as subgroups characterized by the opposite pattern of (low) knowledge and (relatively high) personal justification. These groups also differed with regards to their performance on the multiple-text comprehension measure, with relatively high knowledge, low personal justification students outperforming students with low knowledge and relatively high personal justification beliefs. This suggests that more knowledgeable students were less

dependent on personal opinion when evaluating knowledge claims, and that this pattern of knowledge and personal justification beliefs may have played an adaptive role in multiple-text comprehension. However, low knowledge students may have been more inclined to resort to personal opinion when evaluating knowledge claims and possibly overlooked arguments and evidence in the texts.

Regarding changes in group membership after reading the texts, the majority of students increased their knowledge about the topic and lowered their beliefs in personal justification. Furthermore, the groups with high knowledge with low beliefs in personal justification differed with respect to their beliefs in justification by authority and justification by multiple sources after-reading, with those students that reported a stronger belief in the need to corroborate information across texts (i.e., a stronger belief in justification by multiple sources) outperforming those that reported a belief in the importance of validating knowledge claims using a singular source of authority. Thus, some knowledgeable students seem to realize that instead of replacing reliance on personal opinion with trust in authority, it may actually be a wiser strategy to cross-check various knowledge sources for consistency, with this finding being consistent with previous research on multiple-text comprehension and epistemic beliefs. As in Ferguson et al. (2012), the complex reading situation seemed to lead some students to revise their pre-existing epistemic beliefs about the controversial subject presented in conflicting texts, with this study providing a clearer picture of the changes that were occurring than earlier studies with a variable-centered approach.

CONCLUSION AND IMPLICATIONS FOR EDUCATIONAL PRACTICE

Arguably, the wealth of information about practically any topic, available at the click of a mouse or the swipe of a finger, creates vast opportunities for deep and cohesive learning. At the same time, making sense of this abundance of information is a situation rife with pitfalls for inexperienced learners. Previous research has highlighted several aspects related to skilled reading of multiple texts. In this chapter, we have chosen to focus on the importance of strategic processing and adaptive views about knowledge and knowing.

In order to gain a coherent representation of an issue described in multiple, conflicting, even contradictory texts, our research has demonstrated that students should master the skills of corroboration, integration, and critical evaluation of source information. These skills are particularly pertinent in situations where readers manage to identify information that is relevant for the task at hand. Proficient readers demonstrate a command of these skills, manifested in conscious and strategic navigation, in and between texts, which again influences learning from multiple information sources.

We have also highlighted relations between individuals' epistemic beliefs and the ability to make sense of multiple texts. Specifically, that the demanding and complex problem space created by having readers process, or even struggle with, tasks that

require them to make sense of multiple texts containing conflicting information may lead to changes in their views of knowledge and knowing. Moreover, recognizing the need to identify trustworthy authoritative sources of knowledge or corroborate information across sources, rather than relying on personal opinion, is linked to better comprehension of arguments presented in multiple texts, with this being apparent in students' integrated accounts of information that reconcile diverging perspectives and provide evidence in the form of supported arguments.

The research findings we have presented in this chapter suggest that promoting multiple-text comprehension in the classroom is a complex and challenging instructional task. First, the textbook is no longer the only and paramount source for students' text-based learning endeavors, online resources and other electronic learning platforms are widely used in the classroom. Students should therefore be taught how to strategically corroborate, compare, and contrast across multiple texts, to be able to figure out which claims to place their trust in and what information should be included in their overall understanding of the topic in question. Instruction of such multiple-text comprehension strategies should occur over extended periods and should be integrated into subject-matter teaching, beginning with extensive teacher explanation and modeling, and gradually releasing responsibility to the students. Strategy instruction can be further expedited if students are given the opportunity to take part in collaborative discussions about strategy use on their way toward independent and self-regulated use of comprehension strategies.

Moreover, teachers should be very careful when encouraging students to draw on personal opinion and experience when evaluating knowledge claims in multiple documents. Although such encouragements are given with the best intentions (e.g., to activate and use prior knowledge), they can in fact have a counterproductive effect on students' learning by reinforcing pre-existing opinions and (mis)conceptions. Rather, teachers should create a learning environment that facilitate development of students' beliefs in the importance of justifying knowledge claims by comparing and contrasting the different sources, for example using whole-class discussions where claims and supporting evidence are explicitly scrutinized in collaboration by the teacher and students.

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5. HOW EDUCATIONAL STUDIES MAY CONTRIBUTE TO OUR UNDERSTANDING OF INNOVATION

INTRODUCTION

The Russian psychologist L.S. Vygotsky studied the development of thought and language in children and suggested that learning should be viewed as a process occurring when the child interacts with the world around itself. Most scholars of educational science are familiar with this socio-cultural perspective and for many years its development was mainly within the domain of educational studies. This perspective has been used widely in studies of classroom learning, digital learning and more broadly within studies of education. Since the early studies, the original ideas of Vygotsky have taken form and developed; while they are still used to understand how children learn, they are also used in studies of change in the workplace, technological development and the development of international networks. This chapter reviews the development of socio-cultural perspectives and some of their main contributions, then with reference to recent studies of innovation and technological development; it discusses how socio-cultural perspectives are contributing to our understanding of innovation. Finally some reflections on how these perspectives might be further developed in studies of innovation are discussed. In this chapter it will be argued that the socio-cultural perspective might be particularly appropriate for improving our understanding of innovation including the development of new technologies, new products and services. This paper will briefly review the main approaches and methods used to study innovation and discuss the need for further development of theories of innovation. The socio-cultural perspective will then be introduced, and its spread beyond the field of educational studies be considered in relation to the perceived needs of innovation studies. Some recent publications on innovation, where socio-cultural perspectives has been used, will be reviewed in order to gain a more detailed overview of how using such perspectives might contribute to our understanding of innovation and technological development.

Innovation and technological development has been studied by a broad range of scholars from economics, history, management (Martin 2012: 1219). In the 1980s Roseberg (Rosenberg, 1982: 72) exhorted researchers to get down in the trenches and study the details of innovation as well as the usual inputs and outputs. Now we have bibliometric studies of publications, we have studies of patents and in many countries innovation scoreboards are produced each year showing their levels of innovativeness[1] (ref.). In spite of all these studies there are still many gaps in

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our knowledge (Martin 2012: 1221). One of the gaps revealed in recent studies of innovation is the need for a better understanding of the relationship between individual learning and collective learning, in for example firms (Fagerberg et al. 2005) and a greater focus on the "direct basis of innovation, in other words on the learning process" (Asheim & Paarilli, 2011: 11). This chapter suggests an approach which might prove promising in reducing this particular gap related to our understanding of learning in innovation processes, but firstly the development innovation studies will be presented

INNOVATION AND INNOVATION STUDIES

Until recently innovation studies has not been clearly defined as a field of research, however Fagerberg and Vespargen (2009) defined the field in terms of researchers publishing in certain journals[2] and attending certain conferences[3]. They have identified a network of researchers consisting of economists, sociologists, historians and political scientists. In spite of their differences most of the researchers are interested in development and change in some form; either at the level of the global introduction of new technologies or in small groups, for example, health personnel finding novel solutions to changing needs. In this chapter the term technological innovation is used, this term does not necessarily refer to isolated examples of new technologies, but refers to the overall process of creating a working technology.

There are many reasons why attempts have been made to understand how modern technologies develop and how new services come into being, including those which can be sold for commercial profit and non-profit services. The interest in studying innovation traces its roots back to the work of Shumpeter (1934) who studied how the efforts of entrepreneurs could change the path of development within an industry. He introduced the term of innovation and defined three types – product, service and organisational innovation. Schumpeter also introduced the concept of "creative destruction" whereby the old was pushed aside to make room for the new. Gradually other economists became more interested in the concept of innovation because of its potential to explain the success of some industrial actors or the growth of certain industries. This success did not always conform to the rules of neo-classical economics; some of these businesses should really have failed as demands and markets changed (Solow, 1957). By the 1980s innovation, in particular the development of new technologies was viewed as a major source of economic growth and a prerequisite for the further development of welfare states (Freeman, 1995; Nelson & Winter, 1982). More recently innovation has been viewed as necessary to resolve global problems such as pollution and climate change. Since the 1980s the field of innovation studies has continued to develop and economists have been joined by sociologists, historians and those studying management and education (Fagerberg & Verspargen, 2009).

Within innovation studies various challenges have been identified, such as those facing industrial and political actors bound by past decisions and commitments (path dependence) to break away and follow less predictable paths (path creation), (Nelson

& Winter, 1982; Dosi 1982). Not only the path, but the location of innovation, has traditionally been regarded as an important way of differentiating types of innovation. Innovation is described as happening in firms or organisations, in industrial sectors, in regions or in nations. The traditional way of viewing innovation, and one of the most influential, was as a linear process. The linear model was divided into distinct phases, each dependent on the preceding phase, research was assumed to occur in the early stages then responsibility was handed over to product developers.

Basic research → Applied research → Development → (Production and) Diffusion

The Linear Model (Godin 2006: 639)

This model has now largely been refuted by Kline and Rosenberg (1986), who suggest a more iterative process of multiple feedback loops representing learning assumed to occur at various stages of the process[4]. Many of the subsequent attempts to develop a theory of innovation have moved from linear models to systemic perspectives, such as national innovation systems (NIS) technological systems (Hughes, 1983), regional (RIS) and sectoral innovation systems (Pavitt, 1984). An early proponent of the national innovation system perspective is Edquist (1997 & 2008). He defines the various actors involved in a nation developing new products and services and making them actually work for a population. In other words innovation is not the same as invention or creativity, but includes the whole process whereby all obstacles are overcome and novelties are brought into everyday use. The national innovation system includes multiple actors such as universities carrying out publically funded research, firms collaborating with these universities, consumers using new products and services, politicians regulating and funding, banks financing etc. When Edquist and colleagues tried to apply this approach, by carrying out one of the largest studies using the NIS perspective, they found that they needed to know more about the activities involved in innovation and they needed to "focus strongly on what 'happens' in innovation systems" (Edquist & Hommen, 2008:7). They referred to this as the activities based approach to studying innovation systems.

Another of the central actors in developing theories of innovation is Bengt Åke Lundvall (1992; Jensen et al. 2007). Like Edquist, he too recognised that defining the actors in the system was not sufficient to capture the dynamics of an ever-changing system. He concentrated on the interactions between the various actors and developed the concept of "interactive learning". Lundvall calls for "a new empirical approach" (Jensen et al. 2007:684). He suggested that too much of the analytical work in innovation studies still concentrates on research and development (R&D), measuring R&D expenditures, patents produced and scientific publications as indications of knowledge flows with scant regard for what he calls DUI, doing, using, innovating. His studies in Denmark suggest that many organisations operate partly in a DUI mode, while still carrying out R&D in the traditional way. He stresses the need for a better understanding of the role of problem-based learning in the innovation process and how local knowledge becomes global.

Eric von Hippel was less interested in systems, but he was interested in collaborative processes occurring while technology was being developed and changed. Like the NIS thinkers, he too did not want to simplify the study of innovation, by limiting it to one place or to one group of actors. He viewed it as collaborative process occurring between actors both in a formal way, but also by less formal communications. His empirical work on production firms continuously learning about their technology and improving it, demonstrates the frequent communication with suppliers and consumers and how influential this was in the further development of technology. He defines this as learning by using. He does not necessarily mean that the people learning are the ones using, rather that production firms talk to customers or "users", find out about their experiences and improve a product (von Hippel 1976). He also introduced the idea of "sticky" knowledge, or knowledge which is embedded in practice, often tacit and not easily transferrable (von Hippel, 1994).

Some of the recent analyses of innovation studies have highlighted the need for a better understanding of the links between individual learning and collective learning, in for example firms (Fagerberg et al. 2005). The current status in innovation studies is well summarised by Asheim & Parrilli (2011) when they say that more and more researchers understand the importance of studying innovation in terms of a "learning process" (Asheim & Paarilli, 2011: 11). Although the roots of an underlying linear process are still evident, there is clearly a greater understanding of the importance of interactions as well as their complexity and unpredictability. We now turn to the socio-cultural perspective and discuss its potential to contribute to innovation studies.

SOCIO-CULTURAL PERSPECTIVES ON DEVELOPMENT AND CHANGE

Socio-cultural perspectives include several strands of research such as cultural-historical activity theory (CHAT) and socio-cultural psychology. These research strands build upon some common sources, such as the classical German philosophy of Kant, Hegel, Marx and Engels (Engeström, 1999a) and the Russian tradition of cultural historical psychology of Vygotsky and Leontiev (Chaiklin, 2001; Kozulin, 1986). While socio-cultural psychology has developed out of North American and Western European concerns about the inherent separation of mind and world, or self and context (Edwards, 2007; Chaiklin, 2001). In this chapter the term socio-cultural is used to encompass both activity theoretical studies and other studies based on the concepts originating from Vygotsky (Vygotsky & Cole 1978; Vygotsky, 1986) and of Leontiev (1978).

Vygotsky's work is central for all those working with a socio-cultural perspective. He viewed the development of cognitive skills as something which happens not solely within the head, but in the interaction between people and the world around them, in other words as a social activity. The perspective emerging from Vygotsky's original ideas is therefore focused on analysing social interaction between active participants rather than passive individuals receiving stimulus from the environment.

His concept includes the idea that participants use various means to assist them in their interactions; these can be things like language and tools and the latter can be in the form of either physical or conceptual tools. A conceptual tool can be a theory, a model, a job description, user instructions etc. According to Vygotsky our activities, like our thoughts, can be mediated by the outside world in some way. We might use a stick to help us walk or we might tie a knot in a handkerchief to help us to remember something. These external objects, which we use, link the internal to the external and can expand our capabilities. Vygotsky uses the concept of mediation to explain the interactive activity of the individual, so important to our understanding how people become competent actors in their worlds and how they not only interpret problems or tasks, but also act on them (Davydov, & Radzikhovskii, 1985). Edwards (2007) develops the idea of mediation, suggesting that mediational means can be seen as resources which turbo-charge performance (ibid: 2) making it possible to do more than one could before. Not only do individuals interact with each other in the present, but they also interact with the historical development of their culture in terms of physical objects, long-established institutions as well as certain shared beliefs and common understandings (Rogoff, 1990; Wertsch, 1991). This suggests that the development of ideas and physical artefacts might differ depending on which cultural group has developed them and their needs at the time.

Since the initial works of Vygotsky, the various concepts have been used, refined and developed. The concept of object-oriented activity had been further defined by among others Leontiev (1978). He wanted to demonstrate the connection between individual actions and social practices. He differentiates between activities, which are collective and directed towards an object or towards something which the group are motivated to do. Actions, on the other hand, are individual and aimed at more specific individual goals and operations are the actions, which have become standardised or routine. Development is therefore seen as being embedded in the activities of a heterogeneous group and most of the post-Vygotskian socio-cultural theorists take human activity as their unit of analysis (Yamagata-Lynch, 2010) and view it as part of a system which includes the actors or the subject and the object.

These activities studied, consist of both the observable activities and underlying tensions (Wertsch et al. 1995). These underlying tensions are critical to understanding what motivates particular actions and in understanding the evolution of a system more generally. These tensions or contradictions might be conflicting motives among participants for example the group might prioritise the development a new cancer drug, while some individuals just want the results to get funding for the next project. These different motivations may be aligned some of the time, but when they are not, they may cause friction and problems or breakdowns in work. These tensions can be seen as the engine creating and driving the dynamics of activity systems. The concept of tensions or contradictions is important in many of the studies by Engeström (1999b), who analyses arising tensions and processes to resolve these tensions in order to understand how the system is developing and changing (Barab et al. 2002).

Engeström built on Vygotsky's ideas and developed them to address learning and change occurring where groups of people are working together. Studies carried out by Engeström demonstrate how a heterogeneous group relate to the object of their activity. The object is viewed as emergent or evolving, a kind of virtual object, which needs to be clear enough to motivate a group of people to try and make it a reality, but at the same time it is fuzzy and open to interpretation. It is a kind of pre-object which will hopefully become clearer, sharper, easier to view and understand as the participants learn more about it and learn more about how they want it to be. The object can be viewed differently by different participants, yet at the same time there must be enough in common for them to be able to negotiate how to move forward. Engeström suggests that change is never mono-causal and that groups participate in a process of questioning and analysing leading to the implementation of change (1999b: 383). The participants undergo a process of expansive learning whereby they move from the existing situation to the new desired one or a "historically new form of the societal activity" (Engeström, 1987: 174). In this way the emphasis is not solely on learning or development, but on the transformation of activities and the collective negotiation of new meaning. Much of Engeström's research was carried out in organisations outwith education. Engeström developed the concept of the collective activity system, which includes a subject, object and mediational artefacts, as well as rules governing the collective activity, the wider community, and the division of labour. This is usually referred to as cultural historical activity theory (CHAT).

The term socio-cultural perspective is used to refer to the lens through which the researcher might view development and change. It has been used to analyse systemic development, as in activity theoretical studies, but also in narrower studies of development with a particular focus, such as mediated activity or learning processes. Socio-cultural perspectives have been used to study the interplay between the development of the individual mind and collective activities. Most of the empirical studies have been carried out in educational settings, however in recent years change processes in heterogeneous groups in industrial or workplace settings have been studied more frequently. Innovation may or may not be the aim of the process, but the ways people find new solutions to problems and find new ways of working together are principally what is studied using this approach.

HOW SOCIO-CULTURAL PERSPECTIVES HAVE BEEN USED IN STUDIES OF INNOVATION

In this section some of the publications relating to innovation and technological development will be reviewed and discussed in relation to their contribution to innovation studies. This review is not a comprehensive study of all relevant publications, however it attempts to show the breadth of use of socio-cultural perspectives. The publications range from what the economists would call micro to macro studies; however most of these studies are not confined to one isolated level. For example Lehenkari & Miettinen (2002) analysed the development of a

mobile communication technologies in terms of a technological system. They examined the process of standardisation and they add to Hughes' (1983) original concept by including the idea of co-evolution of technologies and networks taken based on a socio-cultural perspective. "the design object developed from sketches and general ideas to a fully functional system. Simultaneously, the collaborative network expanded from a simple negotiation organisation to a competent system-building network with a sophisticated division of labour and cooperation with industry" (Lehenkari & Miettinen, 2002: 123). By following the development in this way, it was possible to understand the important role of national institutions, differing national and global perspectives and the co-evolution of competence between developers and suppliers of technology. All of which were necessary for this technology to succeed at that time in that place.

A socio-cultural perspective was also taken by Hasu (2000) to study technological innovation within healthcare. This is a particularly interesting example of an innovation process, because it analyses failure. The technology was very successful in tests, however the implementation in a clinical setting failed. Hasu uses the concept of multiple activity systems to understand the process. In order for the technology to be usable, not only did it need to function, but other changes needed to be implemented. These changes affected central management and long-established administrative routines. Without regular dialogue and expansive learning by several groups of participants it was not possible to implement this technology successfully. By taking a socio-cultural approach Hasu was able to demonstrate the links between the individual, the changing technology and the changing market.

Studies of process innovation have been carried out in banking (Engeström, 2007) where tensions caused by declining profits prompted a rethink on work processes within banking. This resulted in new ways of interacting with customers and "sharing" customers with colleagues, which was quite a radical change within banking requiring that rules and routines had to be adjusted and principles of ethics and motivation had to be re-examined in order for this new process to succeed. Engeström also studied a manufacturing firm, which instigated a new flexible production process making it possible for them to diversify into new products. The study links the interactions between individuals to broader trajectories of social and technological change. Other studies have been carried out into the development of new services within the public sector such as the studies by Greig et. al. (2012) on changes within public health care in Scotland, where multiple solutions for multiple locations were necessary for success.

The location of innovation was one of the themes in a study by Miettinen (1998) into the development of potential methods for producing biofuels. While studying the development of the research object over time, Miettinen demonstrated that participants with different competences and at different locations were active in collaborative networks during different phases of the development. Thus the networks needed to evolve at the same time as the research object. This study also provides a particularly good example of how the unclear or unpredictable object

of research developed and changed over time. Similarly longitudinal studies of research environments were carried out by Saari (Saari & Miettinen, 2001), where she demonstrates the gradual learning process taking place on several levels, at the level of the individual and of the aerosol technology research group. The changing motivations are charted as well as other influences such as failing technology and practical and administrative factors. By studying activity systems in healthcare Hyysalo (2009) also examined knowledge created in "multiple, overlapping contexts that set conflicting priorities" (ibid:729). He highlighted how important it was for the developers of technology to make this sticky embedded knowledge visible in order to develop good technological solutions.

Socio-cultural perspectives has also been used to understand how heterogeneous groups of scientists and engineers work together and learn from one another to develop for example new mathematical models (Mattila, 2005) and to develop new technologies within in the fields of nanotechnology and biotechnology (Olsen, 2009 & 2010). These studies link the development of technical competence in individuals with the wider fields of scientific disciplines in academic and industrial environments.

None of these examples are limited to employees confined to one organization, but instead follow the activity of the participants wherever they go. In a similar vein Hyysalo has used the concept of the activity system to improve our understanding of the role of users in the innovation process. He has studied the interaction between users and producers during the early stages of commercialisation and consumer usage of a new health care product (Hyysalo, 2006). His analysis is based on the unpacking of these micro-processes of interaction and what Hyysalo looked at in particular, was the behaviour of users and how this led to changes in technology and in working routines. He refers to these changes as different forms of learning dynamics and defines innovation as a process of "continuous learning and accumulation of expertise" (Hyysalo 2006:94). He uses the term learning dynamics to cover the process of searching, evaluating, reconsidering, building and re-building the technology. The users in this case became aware of the importance of consciously managing this learning process. His paper concludes that the feedback process from users to producers or designers is not some kind of automatic process resulting in improvements as Rosenberg suggested in his concept of information flows in technological innovation. On the contrary, he concludes that high quality feedback needs to be cultivated and carefully nurtured in order to be useful for designer.

Although these examples have all taken a socio-cultural perspective to analyse development and innovation, they have done this in different ways. Some have employed the concept of the activity system, while others have concentrated on the development of the shared object or on mediated activity. Several of the examples draw additionally upon other theoretical traditions, particularly those within the field of science and technology studies, such as actor-network-theory (ANT), the sociology of knowledge, social learning in technological innovation (SLTI). For example Hyysalo (2009) uses the concepts of the learning economy and DUI (Lundvall

& Johnston, 1994), social learning in technological innovation (SLTI) (Williams et al. 2005) in an attempt to develop a framework for better understanding of user-producer relations in the innovation process. He examines how these frameworks treat learning and demonstrates how this affects the way these frameworks can improve our understanding of user/producer relationships. Saari and Miettinen draw upon STS perspectives such as Fujumura's concepts of "doable problems" (Fujimura, 1987) and interactive alignment of activities (ibid), while Olsen draws upon practice-based learning (Gherardi, 2006; Lave & Wenger, 1991). Most of the studies use similar methods consisting of interviews and observations, while some of Engeström's work (2007) has included intervention research methods where participants work together in a "change laboratory"[5].

DISCUSSION

This brief review suggests that there are several different ways in which a socio-cultural perspective can be used to inform our understanding of innovation or to structure our studies of innovation. One way of using this perspective is to identify an activity system and analyse the interactions within the system. An analysis of this kind would view learning as systemic and would analyse tensions and contradictions as they emerge in the system and as they are resolved. This process of change resulting in the resolution of conflicts would in turn change the activity system. This is a powerful tool for understanding the multiple motivations for change and the change processes themselves. Tensions in activity systems do not need to be observed passively, this perspective also lends itself to research interventions, such as change laboratory where researchers and researchers encourage reflection among participants to promote change within or between activity systems. As we have seen, some of the studies concentrate on one or more of the basic concepts from Vygotsky to analyse and understand change processes. These concepts might be object-oriented activity, mediation or the development of artefacts and routines.

By making activity, particularly collective activity the unit of study, an analysis based on a socio-cultural approach will often stretch across the boundaries of organisations or even nations. By following the activity, the researcher is automatically directed to all involved participants wherever they are and is not constrained by some of the divisions used in innovation studies. This might make a study less tidy or contained, but gives the researcher the opportunity to examine potential problems relating to these very boundaries or interfaces. Many of the examples reviewed here suggest that changes needed to be made in different places and by different groups of people in order for a new technology to be successful. A different kind of systemic view, where for example the system is firm and all its employees or a system of national institutions or all vehicle manufacturing companies (a sectoral system), might not be not be able to identify potential obstacles to technological success.

The idea of tensions, questioning the old and the breakdown and replacement of established routines are all central to a socio-cultural perspective. This is exactly what

Schumpeter was describing when he wrote of creative destruction. The evolutionary economists (Nelson & Winter, 1982) suggested that some changes can be gradual, while others require greater upheaval. Ideally we should study innovation in such a way that we can describe and explain both the path breaking innovations and the more gradual ones. By studying the dynamics of change over time and linking them to changes in the broader context, a socio-cultural perspective might be particularly useful. By studying interactions linked to transformative change, we might be better able to identify both incremental change and more radical change.

Another point where the evolutionary perspective of innovation and a socio-cultural approach have complementary views, is on the role of history Both assume that history or what has been done before, has an important influence on later innovations, as demonstrated in the concept of path dependency (Nelson & Winter, 1982). By taking a socio-cultural approach the history would be linked to on-going activities by using culturally developed conceptual or physical tools. The ways these tools are used in the present might influence the path of events, either constraining it or resulting in new innovative versions of the tools or new innovative ways of using them. Although one of the studies mentioned in the review examined role of tool mediation in a technological development (Olsen 2009), no studies have considered this as supplement to our understanding of path dependency and path creation. This would require more in depth analysis.

One of the main differences between the perspectives used by Freeman, Nelson & Winter, Lundvall and Fagerberg and a socio-cultural one is that innovation studies view knowledge as a "thing" an economic resource, an input to a process, the result of a process, something which flows and accumulates in pools, perhaps indicated by a publication or a patent. The socio-cultural perspective emphasises instead the continuous activities where learning is not separated from making new products or developing new processes. This way of studying activities can provide a richer understanding of what "happens" in innovation systems as Edquist wanted and a better understanding of the interactions, which Lundvall wanted. However the epistemic foundations of the socio-cultural perspective are inherently different from theories of innovation and a socio-cultural perspective cannot simply provide the bridges which the other perspectives lack. The studies of innovation where a socio-cultural perspective has been used, do however, demonstrate that there is less need for bridges if the unit of analysis is collaborative activity.

Socio-cultural perspectives have proved to be versatile in that they have been used alongside other perspectives, where they supplement one another, such as STS perspectives, particularly ANT and SLTI. This willingness and ability of researchers to combine a socio-cultural perspective with others demonstrates a certain flexibility and provides future researchers with an array of opportunities for further development. This review has demonstrated that socio-cultural perspectives have contributed to our understanding of how knowledge develops across boundaries such as organisational boundaries and the boundaries of disciplines. It has contributed to our understanding of knowledge development in networks and at multiple locations.

It also appears to be one of the few perspectives to have a tried and tested way of studying and analysing multi-level interactions and how groups make progress in the face of moving targets, or changing objects. Future studies might concentrate on the concepts of tensions and mediated activity to improve our understanding of the dynamics of innovation.

This paper does not take an "either or" stance on innovation studies, that is, the socio-cultural perspective is not being suggested as an alternative to national innovation systems, to technological systems or to evolutionary theories of development of new products and processes. However the socio-cultural perspective has already shown itself to be a worthy contributor to innovation studies and by analysing the development of innovation studies and the development and use of the socio-cultural perspective this paper demonstrates that there is a greater potential to use this perspective in studying to the interrelatedness of local activities and wider social and a technological change. Thus the socio-cultural perspective should be viewed as potentially valuable supplement to existing theories of innovation.

In conclusion it can be said that a theoretical perspective originally attempting to understand how children develop and learn has been tried and tested within educational studies. It has been further developed and refined into a usable perspective with associated methods and approved scientific results before branching out into other learning arenas such as the workplace and collaborative networks. The recent studies reviewed here have been published in peer-review journals which are considered part of the field of innovation studies, as defined by Fagerberg and Vespargen (2009), suggesting that the socio-cultural perspective has already been approved and accepted by experts within innovation studies. More studies showing how a socio-cultural approach might improve our understanding of innovation and technological change might be needed if this line of research is to continue and more studies of interaction between multiple activity systems might also be useful.

NOTES

1 http://ec.europa.eu/enterprise/policies/innovation/facts-figures-analysis/innovation-scoreboard/ accessed 1st June 2013.
2 Research Policy, Journal of Technology Analysis & Strategic Management, etc.
3 Schumpeter, DRUID, EGOS etc.
4 The ways in which innovation is currently measured in terms of its outputs such as publications, patents, products etc. is based largely on the phases identified in the linear model.
5 For more information on change laboratories see Engeström, Y. (2007). Putting Vygotsky to work: The Change Laboratory as an application of double stimulation. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), Cambridge companion to Vygotsky. Cambridge, England: Cambridge University Press.

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PART II

TECHNOLOGY AND DIGITAL TOOLS

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6. DIGITAL COMPETENCE AND STUDENTS' PRODUCTIVE USE OF COMPUTERS IN SCHOOL

Observing the Role of Motivation and Family Background

INTRODUCTION

Since 2006, the ability to make use of information and communication technology (ICT) has been one of five key competencies in the Norwegian school system. The ability to use ICT is not a subject of its own, but it is defined as a basic competence together with reading, writing, numeracy, and oral communication which should be integrated in all subjects. Additionally, the national curriculum consists of competence aims within different subjects at various levels, i.e. after students' completion of 2nd, 4th, 7th and 10th grades. The ability to use ICT is specified within some of the competence aims. For example, in numeracy, Norwegian students are expected to be able to calculate with digital tools as well as to access and present information by using digital tools and media (The Norwegian Directorate for Education and Training, 2012).

Furthermore, the Internet is an important venue for adolescents' social and after-school activities. According to Maranto and Barton (2010), a large proportion of secondary school students use the Internet frequently for different purposes, such as to gather information, do homework, create profiles, upload pictures, listen to music, download films, and stay in contact with friends. The majority of students in upper secondary schools in Norway receive a personal laptop or a tablet computer from school authorities for learning purposes. The students are expected to be able to create a wide range of different materials such as presentations and assignments as well as to critically analyse and evaluate the validity of online resources.

The aims of this paper are to identify students' productive use of computers at school and to explore the factors that predict productive use. We test four hypotheses about how family background and motivation can predict students' ability to use computers productively at school.

The four hypotheses are presented below, and they are underpinned in the theoretical framework.

- H1: Cultural capital predicts students' digital production.
- H2: Home language predicts students' digital production.
- H3: Mastery orientation predicts students' digital production.
- H4: Academic aspirations predict students' digital production.

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THEORETICAL FRAMEWORK

Digital Competence and Digital Production

The fact that teachers and students use computers and tablets at school raises new pedagogical challenges and opportunities for teachers. It is generally expected that schools play a role in the development of students' ability to use ICT in digital production. Furthermore, a fundamental vision of the Norwegian school system is to ensure equal learning opportunities for all students (Hatlevik & Gudmundsdottir, 2013; The Norwegian Directorate for Education and Training, 2005). This vision is also fundamental to the newly established Nordic Centre of Excellence (NCoE). The Centre is intended to explore some of the challenges in the Nordic educational systems, which aim at equal access to education regardless of social class, gender, age, religion, ethnicity, mother tongue, or other variables (Nordforsk, 2013). In 2006, a national reform (The Knowledge Promotion Reform) focused on digital competence and the use of ICT became one of five key competencies in Norwegian schools (The Norwegian Ministry of Education and Research, 2004). The ability to use ICT was not related to one specific subject, but was embedded in the syllabi of various subjects. As of 2012, the curriculum consists of a competence-framework (The Norwegian Directorate for Education and Training, 2012) that divides digital competence into four sub-domains: students' acquisition of information, digital communication, Internet safety awareness, and students' ability to attain digital production. By digital production, we refer to the creative process of making, enhancing, or encoding digital files including various media types such as written content, graphics, video, and audio.

The understanding and definition of technology use at school is, however, a moving target which is difficult to define. This difficulty is mainly due to:

- the emergence of new gadgets such as LCD screens, tablets, and smartphones,
- new or further development of existing resources, computer programs, and applications, and
- changes in human interaction; for example, participant-driven, interactive web services have been introduced following developments of Web 2.0

Digital competence has been used for various purposes. Firstly, the concept has been identified and analysed in research articles (Calvani, Fini, Ranieri, & Picci, 2012; Erstad, 2008). Secondly, the concept has been used in policies related to development and innovation in education (Ala-Mutka, Punie, & Redecker, 2008; European Commission, 2002). Thirdly, teachers have used the concept in their own practice to describe and understand operative skills of the students in school (Krumsvik, 2008; Law, 2008).

From a theoretical perspective, ICT skills, digital skills, computer and information literacy, digital competence, and digital literacy are all examples of terms used to define how students use ICT at school. On the one hand, epistemological differences of the terms can explain why a certain concept is chosen and how the definitions

appear. On the other hand, there may be a more pragmatic explanation, which is characterized by the time the concept was formulated.

In our opinion, the concept of digital competence provides a broad definition when compared to ICT skills, digital skills, or computer and information literacy. The reason we choose to use the term digital competence is because of the changing nature of ICT. Therefore, digital competence can be considered as a more sustainable concept compared to the narrower terms on ICT use at school.

According to Arnseth, Hatlevik, Kløvstad, Kristiansen, and Ottestad (2008), digital competence can be defined as "consuming, processing, applying and producing knowledge and information disseminated through digital media" (pp. 36–37). This definition is rather broad, and it identifies the use of computers both at school and during leisure activities. A more precise definition of digital competence is therefore required in order to be in alignment with how digital competence is used at schools and how it is described in the Norwegian National Curriculum. It is important to situate digital competence within a school context, and one approach may be to adopt the following European Schoolnet definition of digital competence: "the application of acquired knowledge, skills, and attitudes when using ICT in order to perform a task adequately in a specific context" (Balanskat & Gertsch 2010, p.6). This definition is relevant according to the curriculum content of the digital competence objectives in secondary schools (The Norwegian Directorate for Education and Training, 2012). Operationalizing the concept also involves a step-by-step process of specification. According to the competence aims for students in secondary school, which is also supported by research findings (Arnseth et al., 2008; Educational Testing Service [ETS], 2001) and comprehensive analysis (European Schoolnet, 2010), the following three aspects of digital competence are of central importance: (a) the ability to search for information, (b) the ability to integrate information, and (c) the ability to attain digital production.

The objective of this paper is to examine students' ability to attain digital production. The ability to attain productive use of computers can be defined as knowing how to generate information by adapting, applying, designing, inventing, or authoring information. Productive use concerns the students' ability to use computers in reading, writing, presenting, drawing, composing, or calculating. In order to give a more concrete example of tasks, one can refer to the national guidance for teachers in social science, which requires a student to "use atlas and digital maps to find information on the subject" (The Norwegian Directorate for Education and Training, 2013).

Family Background and Digital Divide

According to Pedró (2007) and others, the term digital divide was first linked to access to technology; however, the term may be applied to various situations (Compaine, 2001; Gudmundsdottir, 2011). As a growing number of people gain access to technology, the use and mastery of technologies is connected to new types

of digital divides. Warschauer (2002) noted that a digital divide is not only about physical access to computers and connectivity. Similarly, Frønes claimed that access and use needs to be put in a wider context (Frønes, 2002). The term digital divide can also be used to analyse how students are able to make use of technology as part of their learning activities at school. For example, rather than looking at the personal computer (PC) ratio or the number of tablets or computers at school, it becomes more important to explore how teachers and students make use of the technology, what they consider as being the learning outcomes, and how they produce digital content and develop presentations and reports at school.

When analysing a digital divide, several studies indicate the importance of family background as a key factor to understanding digital divide among students and their abilities to use ICT at school (Calvani et al., 2012; Centre for Educational Research and Innovation & Organisation of Economic Co-operation and Development, 2010; Ministerial Council for Education, 2010; OECD, 2011; Zhang, Wang, & Kolodinsky, 2010). Various indicators have been used to identify students' family backgrounds: for example, parental background (e.g., education, occupation, and household income) (Ministerial Council for Education, 2010) and cultural goods, such as the number of books at home and the language used at home (home language) (Centre for Educational Research and Innovation & Organisation of Economic Co-operation and Development, 2010; Hatlevik & Christophersen, 2013).

In this study, we will examine the productive use of computers among students entering upper secondary school. Research suggests that family background can explain variations in students' information literacy (Ministerial Council for Education, 2010). The Programme for International Student Assessment (PISA 2009) has measured digital reading and their findings (Organisation of Economic Co-operation and Development, 2011) also supports this assertion. Cultural capital and home language are two indicators of family background (Organisation of Economic Co-operation and Development, 2011; therefore, the first hypothesis states that cultural capital predicts students' digital production, while the second one asserts that home language predicts students' digital production.

Motivation

Motivation is an important element in understanding why people act the way they do. In this study, mastery orientation and academic aspirations are the two motivational aspects explored.

Students' mastery orientations can provide an underlying explanation of how students define their own competence. Mastery orientation refers to students' competence as self-improvement according to self-set standards. The notion of mastery orientation is used to describe students' reasons for engaging in a learning-directed behaviour. Students with mastery orientation goals aim at learning, understanding, and maintaining creativity (Warr & Allan, 1998). Students with a mastery orientation experience outcomes as increased interest in learning, they

attribute failure to lack of effort, and they ask for help. Further, students of mastery orientation emphasize the importance of persistence, effort, and academic engagement (Pintrich & Schunk, 2002). In a national study with 9th graders, Hatlevik (2011) found that mastery orientation explained variation in students self-reported digital production abilities. Increased levels of mastery orientation predicted increased levels of digital production.

Students' academic aspirations can also play a role in increasing their motivation. One analytic approach is to distinguish between those aiming for vocational training and those aiming for further academic studies. Calvani et al. (2012) showed that students from schools that prepare them for academic studies perform better on digital competence tests compared with students from technical schools.

Based on these aspects, two additional hypotheses were developed. The two last hypotheses are that mastery orientation predicts students' digital production and that academic aspirations predict students' digital production.

METHODS

This is a cross-sectional study where students completed a test in digital competence three weeks after entering their first semester in upper secondary school in the autumn of 2012. The digital competence test was developed in order to measure whether the students could meet the competence aims described for 10th grade in lower secondary school. It was therefore relevant to link the students' achievements to the school they left in spring 2012, as this school had the responsibility to provide the students with teaching in line with the digital competence aims of the curriculum.

Sample

Initially 4,600 students were tested at the beginning of their first semester in upper secondary school in 2012. However, 1,260 answers were excluded from the analysis because the students did not complete the test or because information about the students' lower secondary school was missing. Therefore, the final sample consisted of 3,335 students from 46 secondary schools. The number of students attending the participating schools varied from 27 students to 191 students. The response rate was approximately 60% of the target population from the municipality.

Questionnaire and Instruments

The digital competence test was developed using a web-based test module solution that provides the opportunity to create different kind of tasks, for example multiple-choice questions, drag-and-drop questions, and fill-in questions where one specific number or word is the correct answer. The answers to the multiple-choice questions were formulated with four options or more. The drag-and-drop questions consisted of three or four words to be dragged into a sentence or an illustration. The test

solution included automatic scoring of the responses. A correct answer was given 1 point, and an incorrect answer was given 0 points. The students had to complete 28 tasks about digital production, and an acceptable level of consistency was achieved (Cronbach's alpha = 0.86).

All questions were embedded in the test as audio files in order to support learners with special needs. It was also possible to embed web addresses, pictures, written texts, and tables together with the questions. A few examples of tasks are presented here:

- Example 1: The students were asked to copy a table into a spreadsheet and to find the average score of several rows.
- Example 2: The students were asked to copy a text consisting of several paragraphs, to paste the text into an editor, and to use the autocorrect in the editor to identify one misspelled word.
- Example 3: The students were given a picture, and they were asked to identify the dimensions of the picture.
- Example 4: The students were asked a question about a specific concept from the curriculum, and the students had to decide the correct answer.

The students were also asked three questions about their mastery orientation. These questions were adopted and translated from Elliot and McGregor (2001). A scale from 1 = strongly disagree to 4 = strongly agree was used. Cronbach's alpha of 0.95 indicates good internal consistency.

The Programme for International Student Assessment (PISA) inspired the questions about students' backgrounds. Two aspects of family background were measured with one indicator each. First, the students were asked about the number of books at home. According to Bourdieu and Thompson (1991), this item can be considered as a valid indicator of cultural capital. The scale intervals for the concept cultural capital were defined as: 0 = no books, 1 = 1–10 books, 2 = 11–50 books, 3 = 51–100 books, 4 = 101–250 books, 5 = 251–500 books, and 6 = 501 books or more. Second, information was also gathered about the students' home language, whether it was Norwegian (the official language in all the schools) or another language.

Additionally, information about time spent on the assessments was registered.

RESULTS

The data was analysed by using the IBM SPSS version 20.

Descriptive Statistics

The sample consisted of 53% boys and 47% girls. A total of 61.4% of the students reported Norwegian as their home language, while 38.6% reported another language. Meanwhile, 9% of the students had fewer than 10 books at home, and 37% had between 11 and 100 books. In contrast, 19% had between 251 and 500 books, and

17% had more than 500 books at home. Finally, the results show that 75% of the students agreed that they have a mastery orientation.

The majority of the students (61.8%) are attending a study program for general studies, and 38.2% of the students are attending a vocational education program. At the national level, we find a distribution with approximately 54% in vocational training and 46% in programs for general studies. It seems that students in the sample were more willing to choose a program for general studies compared with the national distribution. One of the reasons could be that the sampled municipality is urban with access to a wide range of jobs that require higher education, i.e. knowledge enterprises, universities, hospitals, and civil service.

Scores

The average score from the students' digital production questions was approximately 13.67 (sd 6.2). The average scores differed between the schools and the students. For example, the schools with the highest score had an average of 20.1 points, whereas the schools with the lowest score had an average of 12.8 points. The difference between the highest school score and the lowest school score represents 7.3 points.

It is also possible to examine the average score on each of the 28 tasks. Such an examination provides us with information about the difficulty of the tasks. The analysis of these average scores reveals that it was easier for the students to find information from a table compared with using a spreadsheet to calculate the average values from a table of numbers. For example, the average score was 0.71 on a question about how to find information from a table, which indicates that 71% of the students managed to answer this question correctly. The average score on the tasks to conduct calculations with a spreadsheet was 0.36, indicating that only 36% of the students managed to find the correct answer.

Correlations

Correlation analysis is used to identify the relationship between the factors. Table 1 shows the results from the correlation analysis. Students' ability to conduct digital production is positively correlated with cultural capital ($r = 0.36$, $p < 0.01$), motivation ($r = 0.11$, $p < 0.01$), and overall test time ($r = 38$, $p < 0.01$). Regression analysis is used to identify the relationship between students' ability to conduct digital production and language at home ($r = 31$, $p < 0.01$) and academic aspirations ($r = 26$, $p < 0.01$).

Multilevel Analysis

We chose to use multilevel analysis to answer and to test the hypotheses because all students are nested within schools (Bickel, 2007; Heck, Thomas, & Tabata, 2011).

Table 1. Results from the correlation between digital production score, cultural capital, mastery orientation, and test time

	1	*2*	*3*	*4*
1. Digital production score	1			
2. Cultural capital	.36**	1		
3. Mastery motivation	.11**	.07**	1	
4. Test time (control variable)	.38**	.02	.07**	1

Notes
* significant at the 0.05 level.
** significant at the 0.01 level.

The correlation score in Table 1 shows a moderate-high correlation between time and digital production score. A partial correlation was therefore run controlling for time, and the results from the partial correlation shows that, when controlling for test time, digital production score is positively correlated with cultural capital ($r = 0.38$, $p < 0.01$), motivation ($r = 0.09$, $p < 0.01$), home language ($r = 34$, $p < 0.01$), and academic aspirations ($r = 22$, $p < 0.01$). Students represented level 1, and schools represented level 2. Multilevel analysis was run with the mixed models procedure of IBM SPSS.

Three different models were run in the multilevel analysis. The null model is the unconditional, baseline model. The total variance in students' digital production is separated into two components: between schools, and between students-within-schools. The first model consists of cultural capital and home language. The second model consists of mastery orientation, academic aspirations, and time spent on test (control variable) in addition to cultural capital and home language. All variables are on the individual level, and the models consist only of fixed factors on level 1. There is no theoretical basis for including interactions between the factors.

Null Model

Analysis of the intra-class correlation shows that 7% of the variance is attributed to differences between schools, and the residual accounts for 93% of the variance in digital production. Multilevel analysis, rather than regression analysis, is recommended when the school level exceeds 5% of the total variance (Bickel, 2007).

First Model

Home language and cultural capital are inserted into the first model. The estimated coefficients are significant for all of the variables. Change in "-2 Restricted Log Likelihood" (-2LL) between the null model and the first model is used as a measure

of model fit. The first model has a significantly better model fit compared with the null model.

Second Model

Mastery orientation, academic aspirations, and time (control variable) are added to the factors, home language and cultural capital, from the first model. The estimated coefficients are significant for all of the variables. The results show that the second model has a significantly better model fit as measured by the -2LL compared with the previous models. All of the estimated coefficients are significant for all of the variables. The results from Table 2 show that all four hypotheses are supported ($p < .01$).

Variance is decreased as a result of inserting home language, cultural capital, mastery orientation, academic aspirations, and time; the between-schools variance decreases by 86.7% (from 2.7 to 0.4) and the between-students-within-schools variance decreases by 27.4% (from 35.4 to 25.7).

Table 2. Results from the Multilevel Analysis with digital competence as the dependent variable and cultural capital, home language, mastery orientation, academic aspirations and time (control variable) as independent variables (cultural capital, mastery orientation and time are centred). Standard errors are put in parentheses

Fixed Effects	*Model 0*	*Model 1*	*Model 2*
Intercept	*16.09** (.27)*	*11.41** (.65)*	*6.80** (.72)*
Home language (1 = Norwegian, 0 = other)		1.81** (.25)	2.31** (.22)
Cultural capital		*1.04** (.08)*	*0.83** (.07)*
Academic aspirations (general = 1, vocational =0)			2.00** (.21)
Mastery orientation			0.49** (.15)
Time (control variable)			1.46** (.26)
Covariance Estimates			
Residual	35.4** (.87)	32.2** (.80)	25.7** (.63)
Intercept (school level)	2.70** (.69)	.46* (.20)	.36* (.15)
Model fit: -2LL	21 445	21 080	20 386
Decrease in -2LL		365**	694**

Notes:
* significant at the 0.05 level.
** significant at the 0.01 level.
Model fit is measured by the **-2LL** (-2 Restricted Log Likelihood).

SCIENTIFIC SIGNIFICANCE OF THE STUDY

Limitations

There are some limitations to the study, and this has to be taken into account when analysing the findings. First, the response rate shows that approximately 60% of the students in the target population from the municipality participated in the study. This is a lower response rate than we had expected, and it plays a role in terms of generalizing the findings. A part of the explanation is that there is a lack of information connecting students to their departing school (their completed lower secondary school).

Second, all the schools in the sample are located in one municipality; therefore, it is difficult to know if the findings from the study can be used to explain the national situation with regard to how motivation and family background influence productive use of computers. However, it is possible to compare the findings with other national and international research findings in order to identify resemblances and/or differences.

Third, the data were gathered using a web-based questionnaire. This arrangement could have discouraged schools that have not achieved success with regard to the use of computers or tablets at school. Nevertheless, the analysis of the results indicated variation among the schools' digital production scores.

Finally, the sample consisted of students leaving lower secondary school and entering upper secondary school. The conclusions are therefore restricted to students at the secondary school level. Despite these limitations, we found the findings relevant and worth discussing further.

DISCUSSION

This study measures students' ability to use ICT in their digital production. We have found differences on various levels both between schools and between students from the same school.

Four hypotheses were formulated for the analysis of the study: (a) cultural capital predicts students' digital production, (b) home language predicts students' digital production, (c) mastery orientation predicts students' digital production, and (d) academic aspirations predict students' digital production. All of the hypotheses are supported by the findings. The results from the multilevel analysis show that the levels of home language, cultural capital, mastery orientation, and academic aspirations can predict students' digital production abilities. These findings have several implications.

Digital competence is recognized by many stakeholders to be a key competence for students and adults in the labour market. Today, the Norwegian curriculum consists of digital competence aims, and students are expected to attain and develop digital competence during their schoolwork. As an example, when students are

entering upper secondary school, the teachers expect that students are able to use computers in reading, writing, presenting, drawing, composing, or calculating. This means that the students have the ability to generate information by adapting, applying, designing, inventing, or authoring information.

The results of our study show that students' family background, home language, and cultural capital play roles in students' ability to use ICT in digital production at school. Overall, such finding indicates the presence of social inequality in the participating schools. This finding is not in accordance with the vision behind the Norwegian school policy of avoiding inequalities between schools, classes, and students (The Norwegian Directorate for Education and Training, 2005). Based on the findings of a gap between school goals and school results, school authorities and individual school leaders need to start working more consciously and strategically with students' digital production in order to maintaining or growing divides.

Socioeconomic background and academic achievement have been proven to be especially important for educational aspirations (Frøyland & Gjerustad, 2012). Our analysis shows that students' mastery orientation and academic aspirations can explain variation in the students' digital production ability. This is in line with studies on how mastery orientation predicts students' digital competence (Hatlevik & Christophersen, 2013), how mastery orientation predicts students' ability in digital production (Hatlevik, 2011), and how academic aspirations are correlated with digital competence (Calvani et al., 2012; Hatlevik & Christophersen, 2013).

Until recently, we know of few attempts to measure Norwegian students' ability to use ICT in digital production. However, as schools and teachers map what students know and can do, schools simultaneously become capable of making important decisions on how to fight digital divides and inequalities. The analysis of the PISA 2009 assessment showed, for example, that students' digital reading ability was related to the schools they attended, whereas the students' social background seemed to be of less importance (Frønes & Narvhus, 2012).

Finally, it is worth mentioning that the meaning of digital production is changing rapidly because of developments in both hardware, e.g. tablets, and software, e.g. social media for production such as Google Drive and Etherpad. Additionally, this is a rather novel area for assessment, and it cannot be viewed as a "silver bullet" to provide the schools and teachers an easy solution of how to diminish the differences between students and schools. Nevertheless, further studies are needed in order to explore further the relationship between the digital competence and digital production ability and factors such as motivational aspects, attitudes, self-efficacy, students' use of ICT, and how the schools are working with the digital competence aims.

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7. ATTENDANCE IN ABSENCE

Digital Communities as an Alternative to the Classroom

INTRODUCTION

In our information society, information and communication technology (ICT) has gained increasing prominence. Indeed, ICT influences our work lives, our leisure activities and schools. Many countries claim that ICT is important and are therefore developing plans and strategies to implement ICT in the educational system (Law, 2009). In some countries ICT is not part of the curriculum, for example, in the UK; however, other countries are embedding ICT as a core subject or as a core competence that runs through all subjects.

Balanskat & Gertsch (2010) have scrutinised the curricula from some countries where there are initiatives to embed ICT into the curriculum, e.g. Belgium, Finland, Norway and Slovenia. In Norway, reading, writing, arithmetic, oral presentation and the use of ICT have been introduced as basic skills in the school system (Norwegian Ministry of Education and Research, 2004). In this country, the ability to make use of digital tools does not constitute a distinct subject but is an integrated part of the school subjects in primary and secondary schools.

Norwegian municipalities has practical responsibility for upper secondary schools and they have to ensure that students get the teaching materials they need. Since 2007, most of the municipalities have made arrangements to ensure that each student obtains a personal laptop computer. Therefore, the PC-to-student ratio and access to computers are almost 1:1 in upper secondary schools. However, research suggests that students are not dedicated school-oriented users of technology (Centre for Educational Research and Innovation [CERI] & Organisation for Economic Cooperation and Development [OECD]; Krumsvik, Ludvigsen, & Urke, 2011; Tække & Paulsen, 2010). Rather, over the past few years, social media like Facebook, Skype and Twitter have begun to gain currency among young people.

The aim of this paper is to discuss how students are describing their own use of social media in the classroom and how this is related to the school's role in the creation of students' identities.

BACKGROUND: CONTEXTUAL AND DE-CONTEXTUAL LEARNING ARENAS

Tække and Paulsen (2010) have studied how Danish students and teachers perceive the impact of technology on teaching. They found that students' use of computers

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at schools is characterised by uncertainty and ambiguity. First, there is interaction ambivalence because both students and teachers are uncertain about the rules and norms that ought to apply during classes. Second, there is responsibility ambivalence because the responsibility for what goes on in the classroom is ascribed to a variety of factors, such as the computers, the students, the teachers and the parents. The holder of the total and final responsibility is also constantly changing. Third, there appears to be action ambivalence since there is a fundamental uncertainty among students and teachers as to what they should and should not do during classes.

Cases from Denmark and Norway show that schools are choosing different approaches for the use of computers and network during lessons in upper secondary school (Hatlevik, Tømte, Skaug, & Ottestad, 2011; Krumsvik et al., 2011; Tække & Paulsen, 2010). In some upper secondary schools, the students are free to visit whatever websites they wish while in other schools the entire wireless network is closed during lessons or certain sites, such as Facebook, are blocked.

Since the 1980s, Edvardsen (1986, 1998) has been concerned with how the Norwegian school system contributes to social diversity and how students develop identity by accepting their schools' rules for behaviour or by creating distance between themselves and their schools. This was before computers were introduced in schools. According to Edvardsen, one problem is that students do not attend classes and instead occupy themselves with work or have other invalid absences from school. However, when students attend class, their concentration is not focused on what is happening in class or what the teacher is emphasising (ref).

Nevertheless, today many schools have invested in tablets, computers, interactive whiteboards and other technical devices. Computers and the internet allow a certain type of absence from school: During a lesson the students may participate in two or more different communities, both of which require attention and where there are social rules. For example, students are expected to answer questions from their teachers, but when online, they are also expected to participate in interactions with their friends (Tække & Paulsen, 2010). The students are attending class but absent at the same time. In other words, they are physically present in the classroom but are mentally absent because they are visiting various websites while teaching is taking place. In this paper we have defined this as "the absence that is present", i.e. where the students are in the classroom but their attention is online. In this way, ICT has produced a new and modern variant of students' strategies to get through the school day without having to follow or take part in what happens in class.

In our chapter, we will discuss how the implementation of ICT in the classroom gives rise to new forms of attendance and absence among students. As mentioned previously, the key question raised by this paper is: How are students describing their own use of social media in the classroom, and how is this related to the school's role in the creation of students' identities?

Children and adolescents create their identities in community arenas that exist in, or in some cases exist separately from, traditional ones. School takes up a considerable proportion of adolescents' time. Each school has its own agenda, which

is only partially open to the complex identity-forming processes that accompany, as well as run parallel to, the school's knowledge project. In addition, young people bring a set of particular digital practices with them to the classroom.

Furthermore, students are more active users of ICT in their leisure time than for school purposes, and they tend to perceive themselves as more competent in the use of computers and the internet for avocation than for school-oriented tasks (Ceri & Oecd, 2010). The teachers' digital competence in the use of ICT for teaching and administration represent another challenge (Arnseth, Hatlevik, Kløvstad, Kristiansen, & Ottestad, 2007). Some teachers conducted their teacher training before 2006, which is when ICT was implemented as a basic competence in the curriculum. Several studies show that teachers resent external training and prefer to work on a trial-and-error basis (Arnseth et al., 2007). A study of teacher-training college students and ICT indicates dissatisfaction with the training that teacher-training colleges provide for the use of ICT in teaching (Tømte, Hovedhaugen, & Solum, 2009). Acquiring and developing skills in the use of ICT in teaching can represent a problem for recently graduated, as well as experienced, teachers. Arnseth (2004) demonstrates how a deficient understanding of ICT among teachers often means that computers are left unused in the classrooms. A large body of research (Cuban, 2001; Erstad, 2008; Kozma, 2003; Ottestad, 2010; Vibe, Aamodt, & Carlsten, 2009) demonstrates the need for competence development among teachers and other school staff.

ICT and websites are constructive tools for communication and identity formation among students (Madge, Meek, Wellens, & Hooley, 2009). Several modern theoreticians focus on late-modern society as an era during which traditional identity formation with a local base is increasingly being replaced by forms and processes of identity in which young people "shop around" for identity elements and combine them into new, self-composed forms of identity (Sennet, 2001; Ziehe & Stubenrauch, 1982). Students using social media have converted the current theoretical role and self-image of the school as a disseminator of knowledge and practical pedagogy into a much more complicated institution.

We will discuss this issue in more detail using our empirical material from classroom observations and interviews with students in a Norwegian school.

METHOD

This study was undertaken at an upper secondary school in a small Norwegian town. This inner city school provides vocational training for students from the age of 16. We were primarily interested in obtaining narratives from students who had used ICT in teaching and learning activities systematically and over time. Therefore, we have not elucidated the situation prevailing in schools that only use ICT to a limited extent in learning contexts. A school that had participated in ICT-related projects during the years immediately prior to the study was selected.

First, we contacted the school in order to obtain permission to conduct interviews, and then we asked the school to select eight students for a group interview. The data

material was collected from interviews with a group of eight students from a level-2 study programme in vocational training. The group consisted of six boys and two girls. We had told the school that we wanted to have variety of perspectives in the focus group so we had asked that they select students who were motivated about school and students who were not motivated about school.

We prepared an interview guide with some key points in advance of the interviews. However, upon completion of the focus group interview at this upper secondary school, we intended that students should generate their own descriptions and evaluations regarding their use of technologies in school. The entire interview with the students was transcribed. With respect to the analysis of the transcribed text, we conducted a content analysis of what the students told us about their use of ICT at school. We have endeavoured to reveal the confluences and contradictions that encounters between technology and teaching create. We have chosen to include examples of statements and quotes from the interviews in a separate appendix. This has been done to make the interviews more transparent and to highlight the context from which the students' statements emanate. These examples have been the main source of the analyses of the student interviews.

Since this is a qualitative study and it was undertaken in schools that are at the forefront of the use of ICT, its results cannot form the basis for generalisations. Nevertheless, we are convinced that the tendencies in the material can form the basis for more general analyses in terms of theory and relevant research in this field, and for formulating new research questions for renewed qualitative and quantitative investigation of the field. At the same time, the findings from this study provide valuable insights into the challenges associated with the use of ICT in schools.

EMPIRICAL FINDINGS: DESCRIPTIONS OF USE DURING CLASS

The transcriptions of the interviews are illustrations of a school situation that many students experience in Norwegian classrooms. Therefore, we have chosen to quote the transcriptions. The students have been assigned a number, 2 girls (1–2) and 6 boys (3–8)). One teacher is called Arne in the paper, but this is not his real name.
At the start of the interview, the students were asked whether they use the computer for school activities. The students in our study gave only a few examples of this. The students stated that there was no correlation between the teachers' desire to implement ICT in the teaching on the one hand, and the classroom and learning activities on the other.

The students have full access to the Internet and social media during classes. The students reported that they use their computers during virtually the entire school day. One of the students claimed: "When we come to school, then we open the PC at the start of the day, and close it at the end of the day."

> One interviewer asked the students: "So at school you use the PC all the time. What do you use the PC for? What are you doing?"

"3 – I'm on Facebook. Facebook is always open. Then there's Word, Excel, I take notes.

2 – It varies according to different subjects.

1 – MSN and a chat programme are open. I have it sort of on the side."

The students reported that access to the Internet and social media was an important and positive element of the school day. Access to the Internet and social media gave them an opportunity to be present in social media while at school.

During the interview with the students in this class, they reported using virtual and other social media to remain in contact during classes. Two of the students (1,2) reported that they use Skype during classes and communicate with other students by way of chat. When asked about the topics for chatting – school-related or other matters – they denied chatting about school subjects. Instead, they discuss who is going to work or to the gym after school, or what they are going to eat once the school day is over.

The students in this class reported using Facebook and other social media extensively while sitting in the classroom. They had established a separate Facebook group for their class, and it is frequently used: "If we are told to meet for something or other, then we enter it there, so most of us will know," one of the students reported.

Several students told us that they log on to Facebook when they become tired during the day. Many of the students claimed that access to social media through the Internet was important in enabling them to get through the school day: Student no. 2 claimed: "It's easier to get through the school day by communicating with others." Another student (no. 3) detailed: "I cannot stand listening to the teacher for the entire school day".

The interviewer attempted to challenge the students' opinions by asking: "Isn't it difficult to pay attention to the teaching and be on Facebook at the same time?". However, three of the students (# 1, 2 and 4) claim it is not problematic to use Facebook during lectures. The students are not supposed to log on Facebook during teaching, however it seems difficult for the teachers to identify students use of Facebook and other websites during lectures.

While on Facebook, the students do not disturb the teaching, but they are not paying attention either. The students practise a type of absence that is only visible to those who participate in the dialogues on Facebook.

During the interview, the students referred to a particular teacher (Arne) who sticks to more traditional forms of learning. The teacher stands at the blackboard talking, while the students must take notes. The interviewer asks: "You said that you're good at capturing what happens on the blackboard and other things. Do you feel that you're learning more from this teacher?" The students described how they experience a class with their teacher Arne is demanding, because they have to follow him for 6 hours, and he is not using variation in the same way as the other teaches. Therefore, the students explain they are on Facebook during his class.

"8 – For one hour we sat there and took notes. Then we went to Facebook and wrote, now I can't be bothered any more.

1 – Finally we all sat there on Facebook.

7 – And he was talking and none of us paid attention.

8 – We responded just to be polite.

1 – Maybe he ought to stop when we're finished, because then we're so fed up"

In this way, the students give the teacher responsible for why the students do not follow the teaching and prefer to go on Facebook. According to them the teacher ought to stop them from using Facebook. This is in line with findings from Tække & Paulsen (2010) showing that students will rationalize in retrospect, and be disappointed that the teacher did not intervene earlier and stopped from using Facebook, other social media or off-task activities at school. However, the students are not consistent in how they describe their use of Facebook. On one hand they want the teacher to stop the activity, and on the other hand they try to hide what they do. The students explain how they are closing the web-browser when a teacher approaches them.

Junco (2011) has scrutinized the relationship between how frequent students are using Facebook and their engagement. In a sample of 2,368 students he found that students use of Facebook had an impact on how much time they spent in co-curricular activities. Junco (2011) makes a distinction between time spent on Facebook and the activities that students participate in on Facebook. He underpins that his study show that "time spent on Facebook is both positively and negatively related to engagement and that specific Facebook activities are related to engagement." (Junco, 2011, p. 169). It seems that the type of activity the students were engaged in on Facebook played a role in the engagement in learning. Junco assumes that if students are not guided they will use Facebook "in ways that are both positively and negatively related to their engagement and studying" (Junco, 2011, p. 169). Therefore, it seems to be required for the schools and teachers to discuss how they can help students to exploit opportunities in social networking. Junco concludes, "Facebook use in and of itself is not detrimental to academic outcomes, and can indeed be used in ways that are advantageous to students" (Junco, 2011, p. 170).

DISCUSSION: FACEBOOK – A MODERN WAY OF PASSING NOTES?

Historically speaking, presence, absence and absent-minded presence have a long tradition in Norwegian schools. Edvardsen (1986) elucidates this point in his description of how a large part of the socialisation into coastal communities in Northern Norway took place. He describes how the introduction of schools in Northern Norway was turned into a struggle between parents and schools over the

use of the children's time. This struggle for the children's time was a cultural struggle as well as a struggle between different knowledge traditions, or in Edvardsen's words, a struggle between livelihood and salary. In the local community, upbringing and socialisation should prepare young people for professional life. The children were raised to learn skills that could keep the family alive. The contextual aspects of knowledge were irrefutable, and so was socialisation.

Edvardsen (1998) distinguishes between the *presence of absence* and *being absently present*. The empty desk represents one type of absence, the other type is found among the students in the classroom: "Herein lies the possibility of being *bodily* present, but simultaneously *absent-minded*. Or the other way round: Bodily absent – and mentally responsive in another world" (Edvardsen, 1998, p. 80).

When Edvardsen describes students who are "being absently present", he refers to the students' rejection of school as an idea and as a knowledge arena. This does not include total absence; the students are not physically absent. Through their mental absence from the classroom, Edvardsen's students dream of another existence. They use knives or pencils to carve their desks and through this form of presence attempt to establish a distance. Edvardsen uses 'the mental absence of those present' as a collective term for the contextually demanding troublemakers in the classroom (Edvardsen, 1998).

Only a decade ago, it was common for students to communicate by writing questions or answers on a folded slip of paper, and then passing it to the recipient at the other end of the classroom through an ingenious system of overlapping hands, well concealed from the teacher's watchful gaze. In present-day classrooms, this activity takes place through electronic means, on Facebook and other platforms. Just as in the system of notes in the past, the students' today use Facebook or other social media to comment on the teacher. In the order prevailing in the classroom, there is asymmetry between the teacher and the students. On Facebook, the power and authority of the teacher are challenged. In this sense, the introduction of ICT in the classroom has served to exacerbate the contradistinction between the students' and the teachers' interest in learning-centred activities.

For many students, the school day involves an alternation and diversity of knowledge requirements, forms of knowledge and personal presence in the classroom. Being active and attentive on one's own behalf represents a challenge that some students fail to master (Edvardsen, 1998). For some students the school day may embody a struggle to handle a future working life, which has been put on hold, and about which most of them have no definite ideas. In the study, a large proportion is mainly physically present, while their attention is captured by an activity that has been made possible by the digital media available in the classroom.

An interesting aspect of the empirical findings is that they provide a narrative of how the students make use of the school, by attending classes while being absent. Another interesting aspect is that the students who have access to the Internet at school feel that they need to relate to two different sets of rules. One set of rules regulates the activities in the classroom; the other pertains to activities in social

media (Tække & Paulsen, 2010). One of the students told us that it may appear impolite not to respond to requests for contact made by friends or other students through the Internet. The students in our study are often tempted to spend parts of the school day on matters other than school activities.

Today, the schools represent a different kind of knowledge than the students are familiar with from their leisure activities, and the schools are also rejecting this form of knowledge. Reading and writing skills represented the only form of knowledge in the schools. This knowledge was intended to prepare young people for a life other than the one offered by the online communities.

Digital Media as an Arena for Production of Knowledge and Identity

The students' activities on the Internet during the school day cannot be narrowly perceived as a protest against school as such. The students use the school hours to create a new identity and manage their own space in a modern, global culture. We can see from our study that the students spend time developing their skills in this field. We could possibly claim that the lack of contextuality found in the schools' learning project is repaired through the Internet activity that the students pursue during their absent-minded presence in the classroom. Their own "knowledge production" is neither seen nor appreciated by the school. The Internet activity develops in a community of students in exile – through their absence as well as their presence in the classroom.

In the Norwegian society today, the development of intersubjectivity among children and adolescents is associated with several arenas apart from school. Identity is created in the interplay between many communities and knowledge arenas. The relationship between the student and the teacher plays out in parallel with interactions the child engages in with other adults in other arenas apart from school (Edvardsen, 2004). In the students' own modern knowledge arenas they encounter different ways of relating to other people, as well as other ways of acquiring knowledge (Tiller, 2008).

Mead's typology of different knowledge cultures (Mead, 1972) can be used to advantage as a basis for the study of how students use their computers in the classroom. We claim that the students' use of time is partly of a co-figurative, and partly of a pre-figurative nature. School as an arena for knowledge and learning is strongly characterised by post-figurative aspects. During their exile in the classroom, the students incorporate knowledge from peer arenas, and thereby also incorporate other activities into their own. Youth culture is distinctly co-figurative. In computer games and in virtual meeting-grounds, the social interaction with peers is in itself an important factor. Many of the students in our study emphasised the valued qualities of computer games and social networking. Computer games and virtual meeting-grounds emerge as activities related to problem-solving, competition and cooperation. Computer games represent a continuation of the adolescent culture of play. In the same way as virtual meeting-grounds such as social networking

sites, computer games require active involvement and active participation. Through the taking of turns, cooperation and the establishment of social contracts in game situations, the computer games help develop the students' social skills. Requirements and conditions for active co-determination are key elements in the world of computer games, i.e. as they are on Facebook, and thus constitute important elements in a modern democratic and moral mindset. Through their participation in virtual arenas, gamers and Internet users are confronted with moral, ethical and democratic issues. There is hardly a linear transfer of the values from computer games and virtual meeting-grounds to the students. However, the students have the occasion to exercise moral values, and allow them to be confronted with ethical issues and democratic participation through the skills they acquire in the gaming arenas. Through their participation in the various arenas a key feature of the theory of knowledge and learning emerges: The same students change roles in different knowledge arenas. Sometimes they are teachers, sometimes students for each other, as well as of each other.

A Psychological Perspective on the Students' Use of Computers

A key point emphasised by Bateson (1972) is that the pattern of communication in a group reflects the relationship between the group members. Bateson further emphasises the level of communication he refers to as meta-communication. The meta-level of the communication provides the parties in a conversation with a framework within which to locate their communication. Therefore, a key precondition for a good communicative setting is to remain open to the meta-level, in order to clarify the structure of conversation and interaction. Bateson is concerned with what he refers to as the double-bind in communication within a relationship: Double-bind is a concept of communication involving contradictory messages that remain invisible to the participants in a morbid pattern of communication.

On the basis of Bateson's theory of "double-bind" we claim that the students in our study find themselves in a paradoxical situation. The communication between the students and the teachers is characterised by the asymmetry of their relationship. The students, who structurally speaking are in an asymmetric position in their relation to the teacher, are exposed to contradictory messages. They have no opportunity to choose for themselves which of these messages they should relate to. At the same time, there is the threat of punishment if they fail to relate to the contradictory messages. One of these contradictory messages is that the students are allowed to use their computers during classes, but they are not allowed to use them as an arena for escape. This produces a paradoxical situation for the students. Since they are also barred from meta-communicating with the teacher, they are placed in a discouraging and non-viable situation where they are tied to the teacher without any ability to express either recognition or rejection (Laing, 1969, p. 86).

The students are in a similar situation: They cannot choose to let themselves be socialised either in the knowledge arena of the school or in the youth culture of

modernity. The double-bind situation in terms of socialisation emerges because the school nullifies the modern codes of youth culture, and youth culture nullifies those of the school. Since the students have no power of definition in school, many of them retire to a psychological and social exile in the digital networks. In these networks they empower themselves – most likely as a protest as well as a response to their irremediable powerlessness in the school situation. At the same time, these networks represent a more creative and self-controlled management of identity.

CONCLUDING REMARKS

After many years of teacher-centred learning, schools have moved towards an ever-increasing degree of student involvement (Markussen, 2010). In our study, it may appear as though the teacher lets the students carry on with their computers during classes, without paying attention to what the computers are used for. However, the teacher's overbearing stance (or failure to impose limits) will change neither the asymmetry of the relationship, nor the communicative challenges – rather the contrary.

We interpret the behaviour of the students in the classroom as an attempt to cope with the duality of the socialisation context that they find themselves in. Perhaps we can interpret the students' shared meeting-ground on Facebook as an attempt to cope with this situation collectively. The alternative activities of the students in the classroom can also be interpreted as an attempt to meta-communicate. By being engaged in their own activities, they communicate their absence while being present: We are here, but we are absent too. Their physical attendance prevents an absence note from being entered in the school records, while their web-surfing maintains their membership of networks that sustain not only the identity of young people, but also their entire mental and cultural orientation in a society which is made up of digital forms of interaction.

In our study, we can observe at least four strategies used by students. Some choose to identify themselves with the traditional school culture. These students are eagerly present in the classroom. They represent a modern variant of what Edvardsen refers to as *the collaborator*. Collaborators are students who feel safe in their flock. In one context, Edvardsen defines this collaborationism as "chameleon behaviour".

Other students orient themselves towards a totally different life. They identify fully with modern youth culture and often drop out of school. They become "bodily absent". They perceive school as "a waste of time".

A small minority of the adolescents choose a third strategy. They end up as absent from the school culture, as well as from youth culture. In some cases, this lack of ability to choose leads to inaction and anxiety.

These adolescents often concoct their own alternative culture. These isolated youth cultures comprise a wide range of internal points of contact – from drug scenes and (petty) crime to peaceful internal coexistence for a noble and socially beneficial cause. Most adolescents in our study appear to select elements from all of these three

forms. They choose traditional school communities, as well as the modern world. In this newly created culture, they vitalise the traditional school culture as well as modern youth culture. They are present in the classroom – partly absent and partly present in both of their cultural orientations. These adolescents come closest to those Ziehe and Stubenrauch (1982) describe as culturally liberated.

The students in our material shape their own lives, and decreasingly depend on schools and parents. They embody a key feature of modern society: The opportunity to choose different and alternative forms of life. One of the main points emphasised by Giddens (1996) is that young people today can no longer lean on tradition to the same extent as previous generations. This leads to a greater awareness of the choice of what he refers to as "life-span". Therefore, the modern generation of young people need to have a high degree of self-awareness regarding their identity and the choices they make. Giddens is concerned with how this situation with its pronounced self-awareness leads to a new rationality that is typical of post-modern humanity. Further, Sennett (2001) point of departure is that work plays a key role in the socialisation and self-formation of individuals. In modern working life, flexibility has become an important element of the organisation of work processes. Taking this as his basis, he investigates how this form of organisation of work has an impact on the socialisation of individuals. The use of outsourcing, temporary employment and groups that form loose networks has weakened the relationship between employers and employees by producing less predictability and an absence of long-term planning. This has caused the role of the workplace as a permanent social arena to be challenged, and in the final analysis obliterated. This organisation of work entails that highly educated professionals change jobs frequently, and fail to establish a long-term career with one employer. Sennett (2001) claims that this also has an effect on how people function outside of working life. The constant job-hopping means that employees have to relocate to find a new job, and therefore fail to grow into a part of a social community at work or outside of work.

This cultural liberation means that we are progressing from a society governed by fate, to a society where the awareness of being selective and responsible for our own destiny is a key element. The absent attendance of the students in the classroom enables them to be present in their own world. They embody a prominent feature of their era: Identity is created, not inherited.

APPENDIX 1: EXAMPLES OF TRANSCRIPTION OF INTERVIEW WITH 8 STUDENTS (2010)

One interviewer asked the students: "So at school you use the PC all the time. What do you use the PC for? What are you doing?"

"3 – I'm on Facebook. Facebook is always open. Then there's Word, Excel, I take notes.

2 – It varies according to different subjects.

1 – MSN and a chat programme are open. I have it sort of on the side."

The interviewer attempted to challenge the students' opinions by asking: "Isn't it difficult to pay attention to the teaching and be on Facebook at the same time?"

> "2 – The teachers believe that we would pay more attention without the PC, but that's wrong. In lower secondary I sat there making drawings, in the book and on my desk and everywhere. I don't think they will have our entire attention anyhow.
>
> 1 – Concentration doesn't suffer from having Facebook open. I still get good grades.
>
> 4 – You get bored of what's on the blackboard, must have a small break. Then you check Facebook, and then go back to whatever you're doing".

Interviewer: "Do you get any comments from the teacher if you are logged on to Facebook?"

> "1 – You get a warning if the teacher discovers it. I close the pages if the teacher comes around.
>
> 3 – We have internal communication on Facebook in the classroom, for example about the teacher.
>
> 2 – Insanely funny and the teacher understand nothing".

During the interview, the students referred to a particular teacher who sticks to more traditional forms of learning. The teacher stands at the blackboard talking, while the students must take notes.

The interviewer asks: "You said that you're good at capturing what happens on the blackboard and other things. Do you feel that you're learning more from this teacher?" The students responded:

> "2 – We're mostly on Facebook during his classes also.
>
> 6 – But at his worst, when he goes through many chapters, you can lose some of it if you go to Facebook.
>
> 2 – We have [Arne] on Thursdays, we have six classes with him. We work very hard, we must write all the time, pay attention, he keeps us well on our toes.
>
> 1 – Thursdays are tiresome.
>
> 5 – An average class with him gives 1,000–1,500 words in Word, on the word count.
>
> 6 – We can go through two chapters.
>
> 7 – That can be tiresome.
>
> 1 – It's difficult to combine writing down what's there and what he says. I can't do it. And then I go to Facebook.

6 – One can lose focus very fast. Suddenly one just drops away, can't be bothered any more, and then one goes to Facebook.

8 – For one hour we sat there and took notes. Then we went to Facebook and wrote, now I can't be bothered any more.

1 – Finally we all sat there on Facebook.

7 – And he was talking and none of us paid attention.

8 – We responded just to be polite.

1 – Maybe he ought to stop when we're finished, because then we're so fed up"

Interviewer: "Do you discuss with the teachers what sort of learning methods work best?"

"7 – Yeah, at the start of the school year, we did. But now we are fed up with it.

1 – The teachers think they're right and that we should listen to them. Some listen to us, though, but not all. Sometimes, the teacher may get pissed off.

6 – But the teachers discuss between them what's best. We know that, because we give them feedback. Then, the teachers disagree and discuss what's correct.

2 – When we had a large project we were told by this one teacher than many attachments are good, and do this and do that, because that's a plus. Then we didn't have him as an examiner, but presented it to our two other teachers, and they didn't want so many attachments, felt it was quite wrong because it couldn't be evaluated, so some got a minus because of that. They disagree among themselves, and that has an effect on what we're learning"

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8. APPROACHING FILMMAKING AS DIGITAL COMPOSING

A Scandinavian Perspective

INTRODUCTION

An open-ended mix of text, pictures and moving images in new genres characterises many emerging literacy practices and affinity-based online cultures in the 21st-Century. In contrast to analogue technologies, digital technology makes it possible to combine different modes of communication in seamless ways. For instance, digital editing technology has made it possible to work within the fields of photography, animation and moving images with editing software, and more recently with apps on a wide range of tablets. As with photography and social media, moving image production now lies at the heart of everyday literacy practices for many children and youngsters around the world (Haddon & Livingstone, 2012; Sefton-Green, 2012). In the present era of digital composing, we are "all sign makers, remixing cultural expressions into new genres and multimodal texts".

In particular, Scandinavian youngsters are at the forefront of digital composing with digital tools in online environments (Brandtzæg, 2012). Youngsters participate in these new practices across a wide range of academic subjects and integrate these practices into cross-curricular, project-based work (Svoen & Gilje, 2012). In these new practices, which are driven by iterative editing patterns, young people tend to manipulate and remix semiotic resources into a wide range of genres, including moving images.

The purpose of this chapter is twofold. First, I present three different strands of multimodal analysis, and explore how these provide us with an emphasis on different analytical levels and units of analysis. It is particularly interesting to examine these visual cultures of production from a multimodal perspective, as this analytical stance allows for a focus on the orchestration of the full range of modes involved in these composing practices. Thus, the first research question concerns methodological issues in multimodality: how do the focal point and unit of analysis differ among the three strands of multimodal research? I argue that the foregrounded unit of analysis shapes the claims we can make about human meaning making and learning. In particular, I explore how studies of the multimodal creation of texts can mirror the sign makers' interests and motivations, asking what can be revealed about the learner by a primarily empirical analysis of the multimodal text. Second,

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I present four empirical studies on moving image production in order to introduce the readers of this volume to this new field of research in Scandinavia. In doing so, I pose the following question: how can we understand moving image production as an unfolding process of composing and editing multimodal texts? This line of inquiry positions my own work on digital composing (2010)[1] in the landscape of recent multimodal research on moving image production in Scandinavia.

PART I: LOOKING AT TEXT AND MULTIMODAL LITERACY PRACTICES IN CONTEXT

An important theoretical assumption underpinning multimodality is an understanding of sign making as the process of making modal choices in situated (literacy) practices. 'Mode', an important term in social semiotics, refers to the social and cultural resources for making meaning in a specific context (Kress, 2010). To function as a system of communication, the visual modes, like all modes, must satisfy some communicational as well as representational requirements (Halliday & Kress, 1976; Kress & Van Leeuwen, 2006, pp. 40–44). The associated 'categories of meaning choices' (Jewitt, 2013), originally applied to a social linguistic theory, are expanded to account for all the modes encompassed by multimodality. Accordingly, multimodality strives to analytically connect the resources available in certain contexts to how humans make meaning for specific purposes (Jewitt, 2013). This 'making of meaning' with semiotic resources is thus understood as embedded in social practices, constituted of and through the 'social' (Halliday, 1978; Hodge & Kress, 1988; Jewitt, 2013). In other words, multimodality research places an emphasis on describing and analysing "all signs in all modes, as well as their interrelation in any one text" (Kress, 2010, p. 59).

Over the last decade, multimodality has emerged as an analytical approach acknowledged by educational researchers as well as researchers within the fields of ethnography, language and literacy. Drawing on social semiotics, some researchers perform systematic analysis of texts and signs, while others pay attention primarily to situated action and provide an analytical lens for understanding how humans make meaning in a variety of social contexts. Thus, multimodality can be seen both as (a) a systematic description of modes and their semiotic resources, and (b) an investigation of the interaction of specific digital environments (see Jewitt, 2013, for details). While most studies are carried out in the international community of Anglo-Saxon researchers (Bezemer & Kress, 2008; Jewitt & Kress, 2003; Kress, 1997, 2001, 2004; Norris, 2004; Pahl & Rowsell, 2005; Ronald Scollon & Scollon, 2003; Stein & Newfield, 2006), their ideas and perspectives have influenced researchers in Scandinavia in the last decade, resulting in numerous publications (Engebretsen, 2010; Liestøl, Hannemyr, & Fagerjord, 2009; Selander, 2008; Selander & Kress, 2010; Tønnessen, 2010; Tønnessen & Vollan, 2010). In a systematic approach, the text itself is usually the primary unit of analysis. The principle of textual analysis in multimodal research draws on the many studies on Michael Halliday's notion

of meta-functions, which 'work' simultaneously when people make meaning and communicate (Halliday & Matthiessen, 2004). The ideational meta-function refers to how people choose to represent the world with the semiotic resources available in a specific context. The interpersonal meta-function refers to the resources that people choose to represent their social relations with those they are communicating with. This meta-function refers to the use of semiotic resources as part of a social act. It establishes the social relation between the producer, the viewer and the artefact or inscription (text) represented. Finally, any semiotic system must have the capacity to form texts. The textual meta-function refers to the choice of resources employed within the mode to understand the structure of an artefact or inscription (text) by organising the discursive flow and creating cohesion and continuity (Halliday & Matthiessen, 2004, p. 30). These three meta-functions – the ideational, the interpersonal and the textual – will be elaborated below in relation to the analysis of moving images in recent Scandinavian research.

In contrast to the systematic approach, several researchers emphasise how texts are negotiated and talked about in human interaction (Jewitt, 2007). Following this analytical account, researchers are concerned with how modal resources are used in digital composition in specific literacy practices, often involving digital editing software. This perspective allows for an understanding of 'how semiotic resources are used to articulate discourses across a variety of contexts and media, [such as] school, workplaces, online environments, textbooks and advertisements' (Jewitt, 2013, p. 257). This strand of multimodal research is often combined with other perspectives, because a key concern of researches is with the uptake of artefacts and texts in specific (literacy) practices. As Jewitt points out: 'Multimodality has been taken up by many working within New Literacy Studies and there is now a considerable connection between these two perspectives within literacy studies' (2009, p. 38). In order to explore such connections, there is a need to review the three strands of multimodal research in order to identify the distinctive emphases and interests of each.

Three Strands of Multimodality Research

In this last section of the first part of this chapter, I provide an overview, based upon Jewitt (2009) and Björkvall (2012), of three interrelated but distinct forms of multimodal analysis. Both Jewitt and Björkvall compare three different approaches to multimodal analysis with respect to their research orientations and units of analysis (capitalisation mine):

- (1) Social Semiotics Multimodality (SSMA) (Kress, 2003; Kress & Van Leeuwen, 1996, 2001; Van Leeuwen, 2005)
- (2) Multimodal Discourse Analysis (MDA) (Norris & Jones, 2005; Scollon & Scollon, 2003, 2004)
- (3) Multimodal Interactional Analysis (MIA) (Norris, 2002, 2004; Norris & Jones, 2005).

These approaches share an interest in understanding how people communicate and make meaning with a wide range of semiotic resources, or modes. Jewitt (2009) presents and establishes connections among these three 'historical' strands of multimodal research, looking particularly at 'the moment of sign-making', while Björkvall (2012) is more concerned with how these different forms of multimodal analysis focus on either the text or interactional data as a unit of analysis. Björkvall (2012) pays attention to how researchers representing the different strands are oriented either towards systematic, theoretical affordances of the semiotic resource or towards how the semiotic resources are negotiated and worked with in (digital) composing practices. While MDA and MIA differ regarding the unit of analysis, pursuing different emphases in their analysis of the moment of sign making, researchers within SSMA emphasise the sign maker and how semiotic resources are chosen and/or articulated in the moment of sign making. He argues that some researchers within this strand understand multimodal texts as mirrors directed towards the sign maker. The text-is-a-mirror metaphor indicates that a text can reveal the sign makers' interest and motivation (Kress, 1997, 2003). In other words, the outcome of the activity mirrors the editing process of choosing among modal resources (O'Halloran & Smith, 2011; O'Toole & Shukman, 1981) in digital composition practices. In systematic multimodal analysis within SSMA, the focus has been primarily on the composition of artefacts rather than engagement with the processes, on representational forms rather than situated sociocultural practices (Prior & Hengst, 2010). However, SSMA as an analytical strand in multimodality is still interesting for pairing with other theoretical perspectives, like the New Literacy Studies and ethnography.

PART II: DIGITAL COMPOSITION OF MOVING IMAGES: A SCANDINAVIAN PERSPECTIVE

With the emergence of video technology in the late 1980s, the field of moving images was recognised as a new domain for youth creativity. As a response, local media centres and national film festivals were established (Gilje, Frölunde, Lindstrand, & Öhman-Gullberg, 2010; Svoen & Gilje, 2012). Before the turn of the century, few researchers had given attention to this new phenomenon. Drotner's seminal work (1991) on youngsters playing with identity and camcorders in the early 1990s influenced many researchers working with media and youngsters (Erstad, 1997; Tufte, 1998). However, studies focusing specifically on moving image production were rare during the rest of that decade, with a few remarkable exceptions (Danielsson, 1998, 2002). After the turn of the century, a wide range of scholars became occupied with digital storytelling in schools and museums (Erstad & Silseth, 2008; Haug, Jamissen, & Ohlmann, 2012; Lundby, 2008; Tønnessen, 2010; Wikan, Mølster, Faugli, & Hope, 2010), as well as moving image production (Gilje, 2011; Gilje, 2012; Svoen & Gilje, 2012).

There are two main reasons for this progress. First, technological development made it possible for virtually anyone to work with moving image production in a

wide range of contexts towards the end of the ’90s (Sefton-Green, 1998, 1999). After the turn of the century, and in particular since the launch of YouTube in 2005, digital movie production became part of the everyday literacy practice of many young people (Burn, 2007; Potter, 2012; Gilje & Svoen, 2012; Rowsell, 2012). Attention to moving image production surfaced in policy making, and curriculum planners as well as policy makers became advocates of non-formal and formal learning environments that offered youngsters digital tools (Sefton-Green, 2012; Svoen & Gilje, 2012). At the same time, educational researchers in Scandinavia turned to multimodality as a lens for understanding learning resources and processes. The studies on filmmaking discussed in the following section all grew out of these new perspectives on multimodal literacy practices.

Moving Image Production and Multimodality: Four Studies

Although Boeriis (2009) applies multimodal theory, seeing the language of moving images as a ‘dynamic, two-dimensional visual semiotic stimuli stretched over time’, he does not perform an empirical analysis of data. In his PhD thesis, he combines a systematic approach to multimodality with cognitive film theory (Bordwell, 1989), building on Gestalt psychology and neoformalism (Boeriis, 2009; Boeriis & Holsanova, 2012). In presenting new studies in this field, I have chosen to include Boeriis’s thesis as an introduction to the new Scandinavian scholars, because it demonstrates how a multimodal approach can provide a detailed and systematic foundation for analysing moving images. He identifies a large number of modality markers and ‘subsystems’ in his theoretical discussion. In doing so, he discusses the three meta-functions in relation to Halliday’s concepts of field, tenor and mode. Boeriis seeks to elaborate a new methodology for ‘deriving the dynamics of visual segmentation in relation to the underlying cognitive processes involved’ (Boeriis & Holsanova, 2012, p. 259). In this work, Boeriis contributes to a more nuanced understanding of the orchestration of modes in moving images.

In his PhD thesis (2006), Lindstrand makes use of empirical data to elaborate on the meta-functions as analytical tools. When examining moving images, Lindstrand relates the ideational meta-function to choices of ‘what to tell’ – that is, what aspect of the world the film represents. The interpersonal aspects of moving images describe the perspective offered to the movie’s spectator. On this level in the analysis we might ask; whose point of view is offered in the scene? Finally, the textual aspects of moving images highlight the diegetic construction of the narrative world of the film – the film’s language. With reference to Iedema (2001), Lindstrand inquires into how the film, as a multimodal text, is put together as a semiotic construct. This point is further elaborated in a detailed analysis of three films made by young filmmakers (Lindstrand, Frölunde, Gilje, & Öhman-Gullberg, 2011).

A case study in Frølunde’s PhD thesis concerns how twenty-one students in an art class learned and reflected on multimodal design processes in their last year of upper secondary school in Copenhagen. The data by and about the students include

their short animated films, video data about their filmmaking processes, their photos and written diaries as well as individual interviews and storyboards. The data on these students' semiotic processes and their reflections are broken down into three components for further analysis: filmmakers, filmmaking and films. The study applies data analysis methods derived from theories of discourse as social action and visual anthropology (Pink, 2006). Analysis of data is based on MDA (Scollon & Scollon, 2004) as a framework for the multimodal analysis of social interactions, in which the process of filmmaking is seen as a nexus of roles. Öhman-Gullberg follows a similar approach in her PhD thesis (2008), using the meta-functions as well as a multimodal discourse approach (Kress & Van Leeuwen, 2001) as analytical tools to investigate three films. With the meta-functions as a point of departure, she crafts six categories and relates them to generic categories in cognitive film theory (Iedema, 2001; Thompson & Bordwell, 2003). Using pictures from these three movies, she conducted hands-on interviews with the filmmakers. However, these interviews were conducted after the process of filmmaking, looking back at the practice of making the films. By using interviews as a method, inspired by photo-elicitation studies, she was able to emphasise how the students' showing of the films set the agenda for the interviews. In this way, the interviews could explain certain aspects of the films and the outcome of the activity, but the data could not shed light on the practice of digital composing *in situ*. In order to position my own work in the wider Scandinavian landscape of multimodal research, I will investigate how SSMA can be combined with methods found in other approaches in order to analyse the filmmaking process *in situ*.

Understanding Filmmaking, Looking at Multimodal Literacy Practices

Lindstrand argues that filmmaking consists of a number of processes characterised by the production of different kinds of texts, within different genres, using different tools in different media and modes. Looking at teenagers' collaborative work on documentary films, Lindstrand (2006) takes an approach to filmmaking by combining the meta-function framework with methods from visual ethnography (Pink, 2007). In doing so, he marries a semiotic, and systematic perspective, on filmmaking to participatory observations and video recordings (regarded as visual field notes). He concludes that all of these differences in the process of filmmaking contribute to changes – which he relates to the concepts of transformation and transduction in social semiotics (Bezemer & Kress, 2008). By looking at entire collective processes, Lindstrand reveals how the filmmakers reflect upon various aspects of the films during their work, and shows how they gradually become aware of aspects of their films that relate to the ideational, interpersonal and textual meta-functions of the texts.

In my own work, I have been concerned with capturing the interactions of students while they edit moving images in the postproduction phase of digital movie making. Like Lindstrand, I made the methodological decision not to conduct interviews

with the members of the groups, since I shared his interest in how the young sign makers discussed the filmmaking processes, rather than in how they might talk about it afterwards. In particular, I have been concerned with their conversations and negotiations while clicking on the mouse and using the keyboard, and have analysed in detail what is happening on the screen in individual frames/shots. In doing so, I emphasise how sign makers select, adapt and refashion meaning through the process of reading/interpreting the semiotic resources postproduction. I used interactional analysis (Jordan & Henderson, 1995) based on ethnomethodology (Goffman, 1959, 1974) to empirically illustrate how learners engage in digital composition as a way to understand the moment of sign making. By highlighting excerpts in which the students discuss important scenes and transitions in the films, I demonstrate how to empirically investigate semiotic resources in a specific formal learning context. In particular, I pay attention to how these resources are shaped by the norms and rules operating 'at the moment of sign-making' (Jewitt, 2009, p.15). This perspective is somewhat similar that of Lindstrand's thesis, but my investigation pays more attention to the heart of digital production, the iterative editing process of postproduction (Gilje, 2011).

CONCLUSION

The aim of this chapter has been twofold. In the first part, I identified the focus and unit of analysis of each strand of multimodal research. In doing this, I referred to Björkvall who claims (2012) that there seems to exist an assumption that the final text as an outcome of the activity mirrors the processes of situated social practices and makes it possible to establish claims about the practice of composing. In particular, he argues that many Scandinavian studies on multimodality incline towards analysing multimodal texts rather than investigating the creation process in contexts where agents use semiotic resources to make meaning (2012). As pointed in the second part of the chapter, this seems not to be the case in Lindstrand (2006), Frølunde (2008, 2011) and my own work (2010). These studies illustrate how text as a unit of analysis needs to be complemented with interactional data about practices (Kress, 2003, p. 13; see also Lindstrand, 2008).

Approaching moving images from a multimodal perspective feeds into a growing recognition of the potential for engaging learners with visual aspects of 'writing and reading' (Jewitt, 2008; see also Ranker, 2008). My argument is that, in empirical analysis, more attention should be paid to the exact moment when the sign makers attain the meaning they are reaching for. In many cases this moment is possible to record or observe in students' discussions and negotiations while editing in front of the screen; *in situ*. In studies of multimodality, as well as in other research, the methods chosen and the granularity of the analysis must always be guided by the purpose of the research and the ways in which the research questions are posed. In my presentation of recent Scandinavian PhD theses on filmmaking, I illustrated how different tools for investigating text were combined with other theoretical perspectives.

In so doing, I hope to have provided some groundwork for the development of a viable methodology for studying changing literacies in a digital world.

NOTES

[1] PhD thesis: Mode, mediation and moving images: An inquiry into digital editing practices in media education (2010).

[2] Jewitt (2013) also pays attention to (c) identification and development of new digital semiotic resources and new uses of existing resources, as well as (d) contribution to research methods for the collection and analysis of digital data and environments within social research.

[3] I am well aware that Halliday's notions of field, tenor and mode are important as part of the theoretical framework, but in the studies of filmmaking as multimodal composing, the meta-function framework as an analytical tool is more fully developed. Thus, I will refer to field, tenor and mode only in part II, and will not elaborate on these analytical tools in this section.

[4] Burn and Reid associate the word 'interactive' with the interpersonal meta-function, 'suggesting a shift in the distribution of power between author, text and audience consequent upon the advent of digital technologies and the social uses which determine them, and are determined by them' (1999, p. 170). For instance, in Burn and Reid's seminal article on moving images as a kineikonic mode, they refer to the meta-functions as the 'functions of representing ideas, communicating between people and forming texts' (1999, p. 170).

[5] 'resursorienteringen . . . delats upp utifrån om intresset är riktat mot mer systemiska, teoretiska betydelsepotentialer hos resurserna eller mot de aktualiserade' (2012, 145; original language).

[6] 'Field' refers to the norms and rules that make and influence the topics and practices that can be communicated with language within specific contexts, 'tenor' refers to the sign makers' (that is, the language users') relation to each other and their interests, while 'mode', according to Boeriis (2009), refers to the 'channel' of communication, a factor closely related to the current use of 'mode' in social semiotics.

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PART III

TEACHING AND LEARNING

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9. CIRCLE TIME AS WHOLE-CLASS TEACHING – FEATURES, FORM, AND CONTENT

A New Teaching Method in Norwegian and Swedish Lower Primary Classroom

The educational placement of 6-year-olds in Norway and Sweden has undergone important changes at both a policy level and a practical level. Until the early 1990s, 6-year-olds were a part of the Early Childhood Education and Care (ECEC) system. After reform changes and implementation of new school curriculums in Norway (KUF, 1996) and Sweden (Skolverket, 2001; Utbildningsdepartementet, 1998), 6-year-olds were transferred to a school context. In Norway the age for starting school was lowered from 7 to 6 years, and schooling was made mandatory. However, in Sweden parents could (and can) choose to either transfer their children to the school context at the age of 6 or have them continue to attend the ECEC/kindergarten. In 2001 over 94% of all 6-year-olds in Sweden attended preschool class in a school context. Even though the curriculums were based on different demands for participation, both highlighted the importance of the Norwegian first grade and the Swedish preschool class being based on the best practices from preschool tradition and school tradition.

In connection with this change and the associated demands, some of the typical activities in ECEC have been adapted to schools and classrooms. In Norwegian and Swedish classrooms for 6-year-olds, circle time, one of the main ECEC activities, appears to be one of the most frequently used practices to have been transferred to the school context (Bjørnestad, 2009). In this chapter I will describe the features, form, and content of 6-year-olds' circle time in the school context, and discuss if and how circle time can be interpreted as a form of whole-class teaching.

THE IMPORTANT DISCUSSION ABOUT CIRCLE TIME

Discussions during the 1990s in both Norway and Sweden centred on whether classrooms for 6-year-olds would provide the best of both school and ECEC, and one outcome was the introduction of circle time into the classrooms. Despite circle time having a strong tradition in Nordic ECEC/kindergarten (Eide, Os, & Pramling Samuelsson, 2012), research has revealed very little about its features, form, and content. Since circle time is one of the main teacher-led group activities in the 6-year-

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olds' classroom, investigating what takes place during circle time is worthwhile. For the purposes of this chapter, I propose that circle time is the new form of whole-class teaching for 6-year-olds. In other countries (i.e., England) the use of circle time is often related to interactive whole-class teaching (Alexander, 2008; Moyles, Hargreaves, Merry, Paterson, & Esarte-Sarries, 2003; Myhill, 2002; Myhill, Jones, & Hopper, 2006).

Alexander (2008, p. 109) states that teachers need a repertoire of approaches to tailor lessons to the learner, the subject, and the opportunities, as well as the constraints that are present. He promotes three forms of repertoire: *organisational*, *teaching talk*, and *learning talk*. The organisational repertoire encompasses five interactive possibilities: whole-class teaching, collective group work, collaborative group work, one-to-one activity (teacher–child), and one-to-one activity (children working in pairs). Teaching talk describes the talk used by the teacher, which Alexander categorizes as rote, recitation, instruction/exposition, discussion, and dialogue. The first three types of talk relate to traditional teaching by direct instruction, and the final two seem to be used less frequently, even though discussion and dialogue are types of talk that promote children's thinking (Alexander, 2008). Learning talk centres on children's talk, how they themselves talk, and the oral expression and interaction that they need to experience and master (Alexander, 2008, p. 111). Circle time can be described and analysed from the perspective of all three repertoires, and although the repertoires are not necessarily connected, they are often intertwined. In this chapter, circle time will mainly be studied from a didactic perspective, with a focus on circle time as an organisational repertoire related to whole-class teaching, but examples will also give provide glimpses of the other two repertoires. Given that there is little theory and few empirical studies of circle time in the school context in Norway and Sweden, it is important to provide a descriptive and interpretive assessment. Based on data from my PhD study "The six-year-olds' pedagogical activities in Norway and Sweden", descriptive features and content will be discussed. Subject matter and instructional format (task management instruction) will be highlighted with regard to their connection to whole-class teaching (Bjørnestad, 2009).

Circle time is an activity that has transferred from the ECEC to the school context, and it is important to investigate whether it is the same activity or has undergone any changes in the process. To discern any changes, I will rely on Tyack and Cuban's (1995) notion of hybrid, which they introduced to describe changes in the classroom. When two institutions merge, producing a hybrid, an opportunity arises to mix elements from both practices. With regard to teaching, teachers use both new and old practices in the same lesson or, in this case, in circle time. Although one teaching pattern is maintained, the hybrid includes features from different practices. Cuban (1993, 2007) find, that the hybridisation of classroom practices during 1993–2005 has a strong foundation in the classroom, particularly at the primary level. He further states that the distinction between the different traditions (child-centred and teacher-centred) can sometimes appear fuzzy when an activity often includes both traditions (Cuban, 2007, p. 4).

The second purpose of this chapter is to describe how circle time takes place in the 6-year-olds' classroom. By raising awareness of circle time as a teaching activity, I hope to foster discussion and further research on whether circle time as whole-class teaching is an appropriate teaching activity for 6-year-olds related to the recent year's demands and focus on school subjects from first grade and preschool class.[1]

CIRCLE TIME

Circle time has existed in Norway and Sweden as one of the main daytime activities in ECEC since early 1900s (Balke, 1997; Reich, 1994; Sandels, Moberg, Elmgren, & Grundt-Pedersen, 1947; Svenning & Svenning, 1980), and at its root, it is related to the form and content of Froebelian kindergarten pedagogy. Circle time was obligatory in the Froebelian kindergarten, and it provided the teacher with the opportunity to direct the children's attention to his or her own interest or to focus on the children's interests (Balke, 1997). Content in Froebelian Circle time consists primarily of group discussion, storytelling, songs, and finger play. The use of the circle form was grounded in Froebel's strong religious beliefs; the circle is a symbol of infinity and communion with God. Even though the circle form has been continued, however, most Nordic kindergartens have ignored Froebel's emphasis on its symbolism (Reich, 1994).

Despite a well-written history that can be traced back to Froebel, there has been little research on the use of circle time in school (Bjørnestad, 2009; Davidsson, 2002; Svensson, 2009) and kindergarten (Reich, 1993, 1996; Sønstabø, 1978; Walch, 1987) in the Nordic context. Other research concerning the 6-year-olds' classroom confirms that circle time takes place in the lower grades at the primary school level; however, it does not describe how it takes place and what activities occur during circle time (Haug, 1996; Heikkilä, 2006; M. Karlsson, Melander, Pérez Prieto, & Sahlström, 2006; Melander, Sahlström, & Häggblom, 2003; Reich, 1996).

Circle time in kindergarten is defined similarly across research studies. Sønstabø (1978, p. 15), for example, considers circle time to be an organising tool, and states that "Organisationally speaking, circle time is a group situation in which all children within a given unit or the relevant group of children are gathered together with one or more adults, so that all participate in a common activity". Sønstabø (1978) further stresses that circle time is a group situation that is more strictly organised than other activities that take place during the day, and that it shares certain features with a school class in that

> Everybody participating in a group that is directly or indirectly teacher-led, that is cooperating on common activities where the purpose is that all or most of the children are to take part at the same time, and that the structure of all activities within the group is more or less governed by the teacher. (p. 17)

Rubinstein Reich (1993, 1996) later defined circle time in the following fashion:

> Circle time takes place when a group of children and adults at a kindergarten gather together, usually in a circle, and have common activity guided by one or more adults. To be considered circle time, this activity must be a recurrent element in kindergarten and be held in a specific place and at a specific time. (Reich, 1993, p. 15)

These definitions of circle time share the following characteristics: circle time is conducted by the teacher or another adult, and it is a group activity. The person who is leading the activity, in position of being both an adult and leader, has a great impact on the situation (Eide et al., 2012, p. 4). Previous research also shows that the most common components during circle time consist of singing, talking, music, movement, group play, storytelling, "doing the calendar/marking the day", roll call, talking about the weather, and providing information (Balke, 1997; Eide et al., 2012; Emilson, 2007, 2008; Frøbel, 1826/1901; V. Karlsson, 1988; Reich, 1996).

Very few changes have occurred in the arrangement, structure, and components of circle time from the early 1900s. Moreover, it appears that circle time consists of the same procedures and components across Scandinavia and in other European countries and the United States (Eide et al., 2012; Emilson, 2008; Harris & Fuqua, 2000; Housego & Burns, 1994; Reich, 1994, 1996 ; Sønstabø, 1978; Walch, 1987; Wald, Morris, & Abraham, 1996; Yifat & Zadunaisky-Ehrlich, 2008).

Recent research argues, however, that circle time in ECEC is undergoing a change from a social and cultural function to focus more on preparing for school activities (Emilson, 2008; Svensson, 2009). Eide et al. (2012) report that interaction in circle time increasingly adheres to following structure: the teacher dominates the interaction and frequently asks the children leading questions. He or she has the right to change the subject and interrupt a child to take the floor.

CIRCLE TIME: ORGANISATIONAL REPERTOIRE BASED ON WHOLE-CLASS TEACHING AND INSTRUCTION

Circle time shares some characteristics with whole-class teaching, first and foremost by being teacher dominated. Traditional whole-class teaching is characterized by the teacher standing in the front of a classroom and the pupils being seated in rows and pairs at desks while the teacher gives a lecture or instructions related to a subject (Alexander, 2000; Bellack & Kliebard, 1966; Galton, Hargreaves, Comber, & Wall, 1999a; Hoetker & Ahlbrand, 1969; Klette, 2003a; Lindblad & Sahlström, 1999; Sarason, 1982).

Whole-class teaching has been described as the teacher relating to the class as a whole and the individual students relating to the teacher and to each other collectively (Alexander 2008). There is a difference in *whole-class teaching* and *collective group work.* Group work is led by the teacher and can be viewed as a scaled-down version of whole-class teaching (Alexander, 2008, p. 109). The

main procedure for whole-class teaching is instruction and teacher-led discussion. Whole-class teaching has also been defined as simply the sequences of teacher–child interaction. In England, research related to instruction and teaching activities in lower primary school emphasise interactive whole-class teaching, which involves all children learning together (Moyles et al., 2003; Myhill, 2002; Myhill et al., 2006). As with circle time, this kind of teaching enables both talking and listening. Research underscores that talk is the medium for learning, and that talk is the tool that constructs children's ways of thinking (Edwards & Mercer, 1987).

The value of whole-class teaching lies in the teachers being experts, drawing on what learners already know and supporting and guiding them towards a new understanding. One of the benefits of using interactive whole-class teaching is that the teacher is able to discern what the students have or have not understood (Myhill, 2002, p. 348).

This benefit is in line with Anderson and Burns's (1989) understanding of teaching and instruction. Teaching is interpersonal, involving interaction between a teacher and one or more students, and typically involves verbal communication aimed at helping one or more students learn or change the way in which they can or will behave. Anderson and Burns further defined instruction as being either a subset of teaching (one of several teaching acts) or inclusive of teaching (teaching as one aspect or component of instruction). In this chapter, I see instruction (instruction format) as a subset of teaching; more precisely, I see circle time as the teaching activity in which instruction is a subset of many other acts. Some of the major dimensions of instruction are the subject matter being taught, the instructional format in place, the grouping or classroom organisation, and the time available for covering the subject matter.

To characterize, describe, and discuss the use of circle time in a school context as a form of whole-class teaching, Bernstein's (2003) concepts of visible and invisible pedagogy can serve as a point of departure, especially to distinguish circle-time features characteristic of ECEC and of school. Bernstein uses the terms visible and invisible pedagogy to reveal the educational codes related to different institutions such as school and kindergarten. Visible pedagogy refers to an educational model in which there is a distinct hierarchical relationship between teacher and students. Frames and criteria are well known to the students in this model. Institutions that have a visible education are characterized by clear power relations (strong classification), as well as a strong communication control (strong framing). Within visible pedagogy, the disciplinary subjects are in focus and the teacher instructs students in an explicit way in terms of specific knowledge and skills. Bernstein says, "..., the more specific the criteria, the more explicit the manner of their transmission, the more visible pedagogy" (Bernstein, 2003, p. 190). He further argues that visible pedagogy dominates in the school setting, which has also been confirmed in other research based on his theories (Beck, 2007; Bernstein, 2003; Riksaasen,1999; Riksaasen & Vigeland, 1994).

Invisible pedagogy refers to the less visible and more diffuse criteria, which appear vague to the actors. "The more implicit manner of transmission and the more diffuse the criteria, the more invisible the pedagogy" (Bernstein, 2003, p. 116).

Invisible pedagogy is further characterized by a weak power relationship and weak communication control. Within the domain of invisible pedagogy, teachers focus more on students' overall learning process. According to Bernstein and other scholars working with his theories, invisible pedagogy dominates in kindergarten and preschool (Beck, 2007; Bernstein, 2003; Riksaasen, 1999; Riksaasen & Vigeland, 1994).

METHOD

To understand and improve classroom practices we need more complex and systematic studies that involve different types of data (qualitative and quantitative). The research results presented in this chapter are based on qualitative field notes as well as systematic observations gathered from 6-year-olds' classrooms. The observations are based on 10 classrooms, including six Norwegian first-grade classrooms and four Swedish preschool classes. I spent 1 week in each classroom for a total of 10 weeks of classroom observation, which was spread over autumn, winter, and spring. To ensure variation and diversity, the classrooms used were based on a demographic selection of classrooms from urban, rural, and dormitory towns.
One of the strengths of systematic observation is the ability to map out the same phenomena independent of specific cases. This kind of observation also provides an opportunity to outline the frequencies in regard to rate, occurrence, and time spent for various activities in the classroom. In this study, a prefabricated observation scheme with an interval of every 5 minutes was used (Klette, 2003). The scheme mapped out different activities in the classroom, both at the teacher level and the class/pupil level.

In addition to the systematic observation, field notes were also taken. The field notes were continuously written and included all actions and utterances. Field notes provide the opportunity to describe activities, persons, and how actions and utterances proceed in complex situations. Additionally, field notes also help a researcher obtain insight into the processes that take place in the classroom, which are not captured by systematic classroom observations (Klette, 2003) The field notes also reveal the variety of activities in the classroom.

Systematic observation and field notes bolster each other and give a more nuanced picture of the classroom for the 6-year-olds. In this chapter, the focus is mostly on the field notes.

After analysing the systematic observation the most frequent activities at the teacher level were related to providing instruction, using question and answer sequences, and giving individual help. For the class/students the most frequent activities were listening to the teacher, answering questions, and working individually. The systematic observation gives only a pattern over the most frequent activities without explaining them. In an analysis of the field notes related to the systematic observations, the data crystallized and revealed the same patterns in all 10 classrooms. Both instruction and the use of question and answering took place

during the same activity, circle time. Circle time was generally organized in the same way in all study classrooms. To map out which components composed circle time across all 10 classes, I analysed four circle times in each classroom.

DESCRIPTION AND INTERPRETATION OF CIRCLE TIME IN THE 6-YEAR-OLDS' CLASSROOM

Slight differences existed in the terms that study classrooms used for circle time; for example, circle, class circle, class meeting, class corner, and listening corner. The more informal teachers spoke about the activity as circle time. Regardless of the exact term, however, the activity was based on the same procedures and content. Each class began the day with circle time lasting from 20 to 45 minutes. Circle time mostly took place on the floor, on a carpeted area, or in front of the blackboard, and was located away from the pupils' regular seats. The pupils sat on the floor in a semi-circle, with the teacher sitting on a chair in the middle. In all classes, the teachers conducted circle time, which involved various topics and subtopics. In the analysis I identified eight components that took place in circle time across the classrooms: singing, roll call, calendar and schedule for the day, pupil narratives, storytelling, general information, disciplinary subjects and topic and instruction/demonstration prior to next lesson.

Singing was one of the first components of circle time. To ensure a good start and to achieve togetherness, there seemed to be a great deal of implicit teaching and focus on learning a foreign language through singing songs in a different language.

Roll call functions included bringing students together and community building. In addition to social training skills and affiliation, there was also much implicit use of concept training and knowledge acquisition through the utilisation of mathematics as number sequence and quantity and adding up the number of students who were present or absent.

Pupil narratives formed an activity in which the students had the opportunity to speak about their own interests and experiences.

Calendar and schedule for the day varied from day to day and from class to class. Some days, the class simply confirmed the day of the week, date, and month, and on other days literacy was integrated by students reading the day and date from the blackboard or writing it on the blackboard. The calendar and schedule for the day also had a control function in that the teacher only wanted to know whether the students knew the day, date, and month. This component can be seen as an explicit visual representation of the day in which the teacher poses concrete questions about the day, date, and month, as well as the day's schedule. This kind of explicit use of the calendar can contribute towards structuring the school day for the students, leading them to learn that every day is composed of their regular activities.

Storytelling was used consistently in all 10 classes, but it was not used at all circle times. The teacher frequently stopped reading and invited the students to discuss the action and concepts in the text, and control questions were also used to ensure

that the children were following the story. Students were also invited to reflect on occurrences in the text and associate them with their own experiences. Storytelling seems to be the component about which the teacher was the most explicit regarding introducing and framing the activity.

The component *topic and disciplinary subjects* appeared to be the one that classes used the most frequently, and it was seldom introduced early in circle time. The teacher often jumped from one subtopic to another, without introducing the general topic or disciplinary subject. Further, intertwining of the topic and disciplinary subjects could make it difficult to decide which subtopic or activity was the focus. Such frequent shifts make a learning activity less explicit for the student. The positive aspect is that the teacher combines different subjects; however, much of the teaching seems to be implicit and, in this case, the students does not perceive that they are learning about particular disciplinary subjects. Generally, in all 10 classrooms, there was little explicit and in-depth subject matter with duration over 10–20 minutes in regard to this component.

In *instruction/demonstration prior to next lesson*, two forms of instruction were found: instruction for subject matter and instruction for task management. I will provide a more detailed and in-depth description of this component along with illustrations.

Overall, this component gives the impression that implicit teaching, or what Bernstein (2003) describes as invisible pedagogy, dominates most of the learning activities that take place during circle time, mainly roll call, pupil narratives, and working with different topics and disciplinary subjects. However, calendar, storytelling, and instruction are more accurately characterised as visible pedagogy and are explicitly stated in circle time.

Circle time is a day-time activity in which the teacher directs the whole class as a unit. After circle time, and for most of the remaining class time, the teacher takes on a more supervisory role and each student in the class works individually or in small groups; the teacher gives no specific instructions and does not enable interaction within the class as a whole besides snack/fruit break and at the end of the day before students enter after-school arrangements.

Instruction for Subject Matter

The study showed that subject matter was introduced to the whole class during circle time, and it supports the contention that circle time is the daytime activity that is most associated with traditional whole-class teaching for 6-year-olds. All 10 classes used circle time to work with subject-related content related to disciplines such as mathematics, Norwegian, Swedish, and English, as well as topics or themes such as *Reindeer*, *Shop*, and *the Atlantic Ocean*. Subject-related instruction was presented separately as falling within a specific discipline and as an integral part of other activities such as roll call, calendar, and storytelling. Further it was difficult to distinguish when themes were presented as distinct subjects or cross-disciplinary

because they were often closely linked to each other. The following example, from a Norwegian classroom, illustrates how subject disciplines are embedded in other topics, as well as the rapid shift from one topic to another.

Illustration 1: A sequence with English

English as a foreign language is a small component of the curriculum in Nordic countries, and teaching in this subject is based primarily on colours, songs, and numeracy.

Teacher 2 started circle time using English. She removed clothes from a bag and asked for the colour of each article of clothing in English. The pupils replied in English.

1. Teacher 2: "What colour is this?"
2. Pupils: "Blue".
3. Teacher 2 repeats this question with regard to the colours white, red, yellow, and green.
4. When they are finished with all the colours, she asks the pupils: "Do you know why I brought T-shirts from my children with me?"
5. Hans: "We are supposed to wear them when we sing our song".
6. Teacher 2: "I wonder whether you have practised the song while I was away".

(…)

With great enthusiasm, everyone starts to sing a painting song.

In this illustration the English lesson is framed by another topic, and it can be questioned whether the teacher was focusing on English or the song. After the song the teacher once again shifted the subtopic to the recall of homework, play, and so forth. English was only spoken in items 1 to 3. From item 4 onwards, the teacher began to speak Norwegian again, which also marked the shift from English as a discipline to another topic.

Illustration 2: Mathematics as an extension of roll call

Mathematics is often introduced in relation to children's experiences during the day. It is important to note that mathematics activities were mostly based on oral interaction at circle time and were seldom the basis for procedural problem-solving activities after circle time.

In the following illustration from a Swedish classroom, the teacher integrated absent children into the mathematics problem solving.

1. On the blackboard, the teacher writes the names of those who are absent and says: "Six children are absent and there are 17 present".
2. Glenn: "That's twenty-three. Seventeen plus six".
3. Teacher: "Why, aren't you the little mathematics professor". Zoa arrives a little late.

4. Teacher: “How many are on the blackboard? We had six, and if we take one away there are five left. How many are there in our circle now?” Many eager hands shoot into the air.
5. Frid: “Sixteen”.
6. Teacher: “You subtracted one”.
7. Alma B.: “Eighteen”.
8. Teacher: “Correct”.

It is evident from the interactions that both sequences show how the teachers conducted the lesson and dialogue. As in whole-class teaching, the teachers led the discussion, pointing out who was allowed to speak and who was not. Another interesting point to note is the frequent shift between subjects, topics, and subtopics. In the first example, the teacher switched from the subject discipline to the topic, and in the second example, the mathematics sequence is an extension of roll call. The teacher never framed and introduced the disciplinary subjects, but allowed the subtopics to glide into each other without calling attention to the shift.

It can also be seen that circle time is based on direct participation and oral communication; all instruction in circle time was based on oral and verbal interaction, with the help of different artefacts (e.g., the t-shirts) used by the teacher.

Task Management Instruction

The other noteworthy instruction activity during circle time was task management instruction (Bjørnestad, 2009). Task management instruction constitutes preparing for seatwork and other activities during the day. Two kinds of task management instruction appeared to be common to all 10 classrooms; one was based on dialogue and interaction with the pupils, and the other on a monologue with directions.

The following sequences one from a Swedish classroom and one from a Norwegian classroom, illustrates how teachers typically used task management instruction in circle time to prepare for seatwork as the next activity. The sequences illustrate different procedures with regard to preparing for the next activity. However, both procedures occurred in all classes and depended on the content of the following activity. In the first illustration, from the Swedish classroom, the teacher invites the pupils to engage in a dialogue about how to solve the task, and in the second illustration, from the Norwegian classroom, the teacher uses a monologue to demonstrate different kinds of tasks from which the pupils may choose in the work plan.

Illustration 3: Task management instruction through dialogue

(…)

1. Teacher: “Today we are going to look for sounds”. She takes out a sheet of paper featuring a letter and many pictures. “Here we need to find out whether the pictures contain the letter A. For example, *swan.* Does that have an A?”
2. All the children: “Yes”.

3. Teacher: "OK, then you draws a ring around the swan. This is what we are going to do today instead of learning a new letter. But first let's sing all the letters we've learned. Max, what was the first letter?"
4. Max: "A".
5. The second sequence, from a Norwegian classroom, illustrates directions and the task management instruction of the work plan.

Illustration 4: Directions regarding work plan

> Teacher 1 takes over and holds up a sheet of paper with a flower on it (work plan). She explains what is on the paper and what the pupils are supposed to do. As she is telling them what to do, she points to the shelves where they will find the materials they need. The pupils stay still while Teacher 1 is talking. Teacher 2 starts to get the materials out. Teacher 1 goes and gets a paper showing an Easter egg. She holds it up so that the pupils can see it and tells them to colour it in carefully and then cut it out. She specifies that they need to use care when colouring. When she has shown the pupils the Easter egg, she says: "Let me show you one other thing", and she holds up a sheet of paper showing a house. She then continues: "This is a scissors exercise where you are to cut out these", pointing at some squares on the side of the page. She then says "Now let's all quietly go to our seats". The pupils go and sit at their places, and Teacher 1 distributes the sheet of paper with the flower on it to them all.

As both illustrations show, the final part of circle time consists of a sequence in which the teachers use a task management instruction to prepare the pupils for seatwork or other activities that will take place outside of the circle time context. However, it is interesting to note that the instruction is relatively short and primarily oral; further, only the teachers possess the material about which they are giving instruction.

Another interesting aspect is that the pupils are given instruction for seat-related tasks (seatwork) before they actually take their regular seats. One interpretation could be that it is easier to maintain all pupils' attention when they are gathered in a little area/circle than "talking to the backs of their heads" (Galton et al., 1999a, p. 43) after they have taken their seats. It is also easier for the teacher to maintain verbal interaction, eye contact, and direct contact with the pupils, in addition to ensuring that they understand what they are supposed to do.

CIRCLE TIME AS A MIX OF ECEC AND SCHOOL ACTIVITIES

Circle time in the 6-year-olds' classroom is the activity that has the most similarity to kindergarten activities. The teachers in this study called the teaching and instruction activity for the whole class circle time. According to Cuban (2007, pp. 5–6), hybridisation at the primary level is a mixture of both subject matter and more practical activities. He also underscores that one tradition seldom, or never, occurs as unvarnished or pure. The circle time in the 6-year-olds' classrooms can be seen

as a hybrid or a result of combined school and ECEC practices. Circle time consists of a mix of components that are particular to circle time in ECEC and characterised by an implicit and invisible pedagogy. On the other hand, it has components that are traditional in the school context and in whole-class teaching, such as disciplinary subjects and instruction. The combination of school and ECEC practices in circle time seems to be adapted for this age group.

The components linked to ECEC circle-time descriptions are roll call, song, calendar, storytelling, pupil narratives, and providing information. The components of the disciplinary subjects and instruction seem to have been less frequent or absent from ECEC circle times. However, in my analysis, they represented the most frequent components in the 6-year-olds' circle time. Both Reich (1993) and Emilson (2007) express concern about focused subject matter and concept learning also coming to dominate circle time in ECEC settings. If we take a closer look at, for example, *roll call* in 6-year-olds' circle time, it appears that it is implicitly advancing concept training in mathematics. This was the same regarding *storytelling*, which is characterised by alternation between storytelling by the teacher and control/follow-up questions from the text. As it relates to the concept of hybrid, even if the external frames for the components seem to be the same, the content may have qualitatively changed during the transformation process from ECEC to school.

The analysis of the data showed that there was frequent use of implicit teaching, or invisible pedagogy (Bernestein, 2003). The teacher seldom expressed the learning aims and outcomes or focused on the subtopic. Further, the research showed a lack of an introduction or a summary of the subtopics. As described, the components, in particular the subject matter, were intertwined with other components used in circle time (example illustration 2). Related to the second purpose of this chapter, it is of interest to ask how the frequent use of implicit teaching in circle time as the main teacher-led activity affects the learning outcomes and the demands/criteria of the curriculum about the disciplinary subjects.

Circle Time as Form of Whole-Class Teaching

An in-depth analysis reveals that circle time was the most frequent teacher-led activity conducted during the day, and one in which all of the main disciplinary subjects were presented. The teacher served as the "ringmaster" who led the students through circle time. In this activity, the schedule of the day, subject matter, and instruction for the next activity were collectively presented to the class as a (whole-class) unit, and circle time can be seen as a form of whole-class teaching. Students sitting in a ring and interacting with the teacher as well as with other students reflect both Alexander's (2008) and Myhill's (2002, 2006) definitions of whole-class teaching. Circle time was also shown to have a connection with interactive whole-class teaching as Myhill (2002, p. 348) defines it: "…the interactive whole-class teaching…are intended to involve all children learning together". However,

the quality of the circle time/whole-class teaching can be questioned due to the frequent shifts and the absence of explicit marking of subjects and transition to new subtopics.

CONCLUDING REMARKS

In this chapter, I have described the use of circle time in the 6-year-olds' classroom from a didactic perspective, or more precisely, as an organisational repertoire. Here, I have highlighted the components that constitute circle time and how the teacher organises this activity. One critical point needs to be made. As described in this chapter, explicit teaching tends to be lacking with regard to the disciplinary subjects. A more explicit and clearer focus on the subjects or other activities that are underway can contribute to developing students' awareness of their own learning process (Alexander, 2008). One of the benefits of using interactive whole-class teaching is that the teacher is able to discern what the students have or have not understood (Myhill, 2002).

For example, when the class is working with poems, rhythm, spelling, and numeracy, it is important for the teacher to term the activity as Norwegian/Swedish, math, or English (foreign language). In this way, circle time can promote the students' socialisation within the world of the subject matter and terminology, which strengthens their concept understanding in different disciplinary subjects. In this chapter there has been little focus on how teacher–student and student–student interaction appears, and what Alexander (2008, p. 109) refers to as the two other repertoires that the teacher needs in his or her approach portfolio: teaching talk and learning talk. If circle time is defined as a form of interactive whole-class teaching, it will be interesting to study how different interactions and dialogic approaches occur, especially with regard to the explicit teaching of disciplinary subjects.

NOTE

[1] The second purpose will not be addressed in this chapter, but it is hoped that it will contribute to further discussion among researchers and primary teachers.

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10. "COMMUTING"

How Linguistic Diversity Is Made Relevant in Young Bilingual Girls' Identity Negotiations

The Scandinavian debate related to language-minority students in preschool and school settings tends to concentrate on their functioning in monolingual settings, often ignoring the fact that these children grow up in multiethnic and multilingual contexts (see discussion in Cromdal & Evaldsson, 2003). However, a range of ethnographic studies conducted within the Nordic school context have demonstrated how children participate in bilingual and polylingual practices during their everyday interactions in preschool and school (Aarsæther, 2003; Cekaite & Evaldson, 2008; Cromdal, 2004; Evaldsson, 2005; Jørgensen, 1998). Speakers in multiethnic settings may use the languages at their disposal (as well as languages over which they have only limited command) to achieve a variety of social goals (Rampton, 1995; Møller, 2008), for instance, to renegotiate belonging and ethnic/linguistic boundaries and construct group affiliations. The present study builds on this research by focusing on how linguistic diversity is attended to and made relevant as part of young girls' identity negotiations. Anchored in an ethnomethodological perspective of identity, eloquently described by Widdicombe as "something that people do which is embedded in some other social activity, and not something that they 'are'" (Widdicombe 1998: 191), we explore how social identities are negotiated through linguistic resources, such as language preference and language alternation. More specifically, we investigate how one bilingual girl, Ayşe, uses her two languages, Turkish and Norwegian, as resources in negotiating belonging and social status within multilingual peer groups in preschool and school.

A DIALOGIC APPROACH TO IDENTITY-IN-INTERACTION

Dialogic theory (Linell, 1998), inspired by Bakhtin (1981, 1986), emphasizes situated meanings and functions and how language is a part of the communicative and cognitive practices of actors-in-context. Bakhtin accentuated that people's utterances are always responses to the voices of others in that they both react to and foresee the perspectives of others when they speak: "I try to act in accordance with the response I anticipate, so this anticipated response, in turn, exerts an active influence on my utterance (I parry objections that I foresee, I make all kinds of provisions, and so forth)" (1986, pp. 95–96). In this perspective, communicative participants

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should not be perceived to have a clear, unmediated understanding of their own or their interlocutors' intentions during interactions. Utterances display a multiplicity of actual and potential meanings, open to be populated by the interpretations and intentions (or voices) of others—like a "loophole" left open (Bakhtin, 1984: 233).
More broadly, our everyday conversations are patterned into speech genres depending on the contextual features and social purposes of the situation. Bakhtin (1981, 1986) introduced the term "chronotope" to refer to particular genres, or relatively stable ways of communicating, which represent specific worldviews or ideologies. Importantly, these contexts are not cultural fossils or templates, but cultural resources that are continually reconstituted within new contexts and in the hands of new users. As articulated by Gardiner (2004), the meanings that utterances evoke are only provisionally stable because they are inherently value-laden, linked to shifting contexts and situations. According to Brown and Renshaw (2006), the chronotopes of time and space express how our everyday experience is tied to the distant past (or past voices) and to the future (the possible and imagined). It follows therefore that discourse participation both mediates cultural identities and provides children with a way of making sense of themselves. In this process, children's differing positions may produce controversy and tension among interlocutors. Bakhtin emphasized that social interactions that are characterized by struggles and tensions are needed for people to come to new understandings: "The importance of struggling with another's discourse, its influence in the history of an individual's coming to ideological consciousness, is enormous" (1981, p. 348)[1].

LANGUAGE ALTERNATION AND LANGUAGE PREFERENCE IN NORDIC MULTIETHNIC SCHOOL SETTINGS

In a study of Urdu-Norwegian-speaking fifth graders in Norway, Aarsæther (2003) described how the students alternated between their two languages as a means of positioning themselves in situations of rivalry or conflict and in order to negotiate social status and hierarchy within the peer group. According to Auer (1998), alternating to another language (code-switching) becomes meaningful when the switch to another language appears to be a deviation from the language of interaction in a given situation. According to this view, code-switching may be a form of coloring one's language, for instance, for the purpose of stressing a particular point, changing the mood, or simply closing the conversation to others by means of changing the language. Pointing to the complexity of language use within multi-ethnic settings, researchers have warned against simplistic uses of terms like *code*, *language*, and *bilingual*—terms suggesting a distinct separation of linguistic categories. Møller (2008) introduced the term *polylingual* as more appropriate in describing the fluent and creative use of linguistic features observed in verbal interactions, while Jørgensen used the term *languaging* in order to account for polylingual communicative practices among language users who "employ whatever linguistic features are at their disposal with the intention of achieving their communicative aims" (Jørgensen, 2008: 169).

At the same time, children may also show individual preferences for using (and alternating to) a particular language. This preference may signal the values an individual ascribes to a certain language and the attachments it represents, but it may also be related to language competency. Cashman (2005) suggested that language preference functions as a membership categorization device, which serves as a resource for ascribing, accepting, or rejecting group membership. A similar perspective was emphasized by Ellwood (2008), who argued that individuals seek to align or disalign themselves with identity categories that are made available in society and that these processes are supported or disrupted by others, who are participating in their own identity negotiations and who may also seek to impose identities on their interlocutors.

This point was clearly demonstrated in a study conducted by Cekaite and Evaldsson (2008) in two multiethnic primary school classrooms in Sweden. While engaging in truly polylingual practices, students were seen to both impose on each other the monolingual norm of speaking Swedish in class and cast peers as incompetent speakers of a particular language. At the same time, students were observed to actively and subversively exploit the monolingual norm for their own purposes. Hence, the students appeared to both appropriate and challenge the social norm of monolingualism within these multiethnic classrooms. In a study of Turkish immigrant children in Norwegian preschool and first grade classrooms, Rydland and Aukrust (2008) revealed how these young children were not naive or indifferent to the boundaries and dissimilarities following from their ethnic minority status within Norwegian society. Children were, for instance, ascribed an ethnic identity by their peers, but they were also observed to renegotiate these ascribed identities in an attempt to bring together their Turkish and Norwegian belongings. According to Rydland and Aukrust, the children in their study relied on their Turkish resources, such as their Turkish language skills, to navigate this challenge in relation to their peers. Similarly, Slotte-Lüttge (2005) found that Finnish-Swedish bilingual children alternated to the Finnish language as a means to reject participation in the Swedish language interactions of their classrooms.

A typical multiethnic classroom in Norway may be comprised of some children who speak the same heritage language and some children who do not. In the present study, we are interested in how bilingual children may make their two languages relevant in their ongoing identity negotiation vis-à-vis peers. We address this issue by exploring how one bilingual girl and her peers negotiated their belonging and social status through the linguistic resources of language preference and language alternation in preschool and school.

Data for the present paper was collected as part of a larger study of Turkish-Norwegian-speaking children who were followed from preschool to fifth grade[2]. As part of the overall study, Ayşe was visited in her classroom four times over a period of six years (i.e., when she was 4, 5, 6, and 10 years old). As part of the overall study, the first author and colleagues spent quite some time in Ayşe's classroom at the first three visits (about a week each time), conducting videotaped observations. Ayşe

grew up in a multiethnic neighbourhood with a relatively large share of Turkish-Norwegian speakers. As we became increasingly interested in how the Turkish-Norwegian speaking children in this community came to navigate the use of their two languages in their everyday interactions, we decided to ask for an additional consent to extend the observation of Ayşe and her peers in class as part of the fourth and final visit in fifth grade. Hence, when Ayşe was 10 years old, the first author observed (videotaped) her in the classroom over seven days, both while working with school tasks and in informal conversations with peers.

AYŞE AND HER FAMILY

Both of Ayşe's parents were born in Turkey and immigrated to Norway in their youth. Ayşe and her older sister were born in Norway. Ayşe's mother worked as a cook in a restaurant, and her father worked as a plumber. The family lived in an apartment block in close proximity to the school. Ayşe's grandparents and two of her aunts lived nearby. In the local community, Ayşe's family was engaged in a Turkish association that met regularly and organized activities and courses for children.

Ayşe entered preschool when she was one year old. The ethnic composition of the students in Ayşe's preschool classroom reflected the ethnic composition of the community, with a relatively large share of Turkish-Norwegian-speaking students in the class (n = 10). The children were visited a few days a week by a Turkish-Norwegian-speaking teacher, who interacted with the children in both Turkish and Norwegian. Apart from this, Norwegian was the common preschool language in teacher-led activities. Probably because of the large concentration of Turkish-Norwegian-speaking children in the preschool, as well as in the children's community, most interactions initiated by the Turkish-Norwegian-speaking children were in Turkish.

Ayşe entered school when she was 6 years old. In school, Ayşe was allocated to a multiethnic class with a relatively large share of Turkish-Norwegian-speaking girls (n = 4) and boys (n = 5). A rich use of and command over the Turkish language was evident among these students, even in the fifth grade. The school offered mother-tongue instruction and bilingual instruction for four to six hours per week to the Turkish-Norwegian students throughout the first four years of schooling.

When Ayşe attended fifth grade (age 10), the first author conducted one in-depth interview with Ayşe's parents and one in-depth interview with Ayşe herself about issues related to school and language use. Both Ayşe and her parents stated that the family spoke mostly Turkish at home. At the same time, Ayşe's parents stressed the importance of gaining access to Norwegian-speaking peers and developing competency in the school language in order to succeed in the Norwegian society. In addition, Ayşe's mother explained that she would use Norwegian with Ayşe in some settings, for instance, right after school/work when both of them had been speaking Norwegian during the day or when she was helping Ayşe with her homework. This flexible and fluid use of both Turkish and Norwegian in the home was evident in the

mother's account of how she solved a problem that occurred in preschool when Ayşe was 3 years old:

> …for a period of time, she refused to speak Norwegian (…) and I was so worried she had forgotten all the Norwegian, you know. So there was a period when I refused to speak Turkish at home – with her (laughs). I only spoke Norwegian at home (laughs). Like when she was speaking Turkish the whole day together with her friends, we turned the day (…) Actually, I was worried *all* the time (laughs) (…) then in school, she entered a minority group, you know, without Norwegian children in her class. So quite a lot I have worried. What kind of development will she have, you know, if she can continue her education…

This extract, like many of the accounts provided by Ayşe's mother during the interview, exemplifies this mother's tireless and continued efforts to help her children access Norwegian language exposure within a community with many Turkish-Norwegian speakers. Simultaneously, Ayşe's parents stressed the importance of maintaining the Turkish language. When asked about what they perceived to be most important challenge for them as parents, Ayşe's mother replied,

> …the most important thing is that they (Ayşe and her sister) adapt to the culture here and that they can adapt to the culture in Turkey – that they can commute well – the bridge. It is very good if they can take care of both cultures and both languages and at the same time respect the other culture.

When Ayşe was asked about her language use with her peers in class, she said that she would use mostly Norwegian in school, underscoring the need to use Norwegian as the common language: *"We speak Norwegian because we sit around a big table, so everyone should understand."* At the same time, she often employed Turkish in her private conversations with her best friend Emine*: "Emine and I speak mostly Turkish in class because she understands Turkish better than Norwegian."* Ayşe also explained how she and Emine use Turkish when they interact:

> …when we speak Turkish, we are used to it – sometimes, the Turkish words just come up, and when we don't understand and can't explain it fully in Norwegian, we just put the words in Turkish and translate it into Norwegian and that mixes them….

Ayşe's description here highlights at least three important aspects of language diversity in children's interactions. For one, children are sensitive to the norms of language use (e.g., communicated to them by parents, teachers, and peers) and the contextual factors guiding these norms (e.g., to speak the majority language as the common language in school, what Cekaite and Evaldsson, 2008, label the "monolingual norm"). Second, children closely monitor and adapt to their peers' language competency and also use these linguistic categories in processes of social positioning. Ayşe explains (or justifies) her use of Norwegian and Turkish in terms of her peers' limited proficiency in one language or the other. At the same time, and

this is the final point, languages are not treated by conversational participants as juxtaposed or fixed linguistic entities. Ayşe's portrayal of how she speaks with her peer Emine underscores her dynamic and fluid conception of languages (see Møller, 2008, for a discussion). This lack of boundaries between languages is also evident in the way Ayşe stressed that she did not fully understand the kind of Turkish that is spoken in Turkey. She stated a preference for the "Norwegian-like Turkish," or Turkish with a Norwegian intonation.

PROCEDURE

The tape recordings were first transcribed by research assistants, and then we (the authors) double-checked these transcripts against the videotapes following a modified version of the transcription conventions of Conversation Analysis (Sacks, 1992). All episodes of Turkish language use and alternation between Turkish and Norwegian were transcribed by a Turkish-Norwegian-speaking research assistant. The translations in the transcripts selected for analysis were further validated by a second Turkish-Norwegian speaker.

Acknowledging the perspective that children's identity negotiations vis-à-vis peers start early in life, we decided to look at Ayşe's play interactions in both preschool and school. We did not aim to investigate the development of language alternation practices per se, but we wanted to explore whether common themes would emerge over time in how Ayşe positioned herself vis-à-vis her Turkish- and non-Turkish-speaking peers in class. For this purpose, we first searched for situations where both Turkish-Norwegian-speaking and non-Turkish-speaking peers were active participants in the play with Ayşe. As a second step, we searched for episodes where language was attended to by the children either explicitly or implicitly (e.g., through language alternation). Based on this search, we chose to analyze in depth one peer-play situation with Ayşe in preschool and one peer-play situation in the fifth grade (each approximately 20 minutes long).

Methodologically, the dialogical perspective implies that utterances should be studied in their immediate, dialogic context in order to understand what communicative act the person is performing. In order to trace how children's identities are made relevant in talk, our analysis focused on the turn-by-turn sequentiality of how participants responded to each other's utterances and the local interactional functions of language preference and alternation (Gafaranga, 2001). The analysis of the video data was an iterative process where we continuously discussed our interpretations of the interactions, moving back and forth between the videotapes and the transcripts.

PRESCHOOL PLAY

The first example (Example 1) is drawn from a play situation that occurred when Ayşe attended her last year in preschool. Ayşe was in the playroom with Semra (who

is ethnically Turkish), Ruth (who is ethnically Somali), and Oda (who is ethnically Norwegian). While Ayşe often played with Oda, Ruth, and other girls who spoke mostly Norwegian in the preschool setting, Semra usually played with some of the other ethnic Turkish girls in class, including Ayşe. By the end of preschool, Ayşe was quite used to playing with peers by means of the Norwegian language. Although some of the other Turkish-Norwegian-speaking students in Ayşe's preschool class were likewise adept at using the Norwegian language, many of the Turkish-Norwegian-speaking girls, like Semra, tended to play mostly with Turkish-Norwegian speakers and thus relied extensively on Turkish in their peer-play conversations.

Implicitly Ascribing, Accepting and Rejecting Categories of Belonging

After some initial negotiations related to whether Ayşe and Semra should be allowed to join the play with Ruth and Oda, the girls inhabit their roles in the pretend play scenario of a family. However, a tug-of-war led by Ayşe and Ruth tends to surface throughout the play that unfolds, in which different oppositions and alliances are being built and defended.

Before the first excerpt, Semra was either very quiet or she addressed Ayşe in Turkish. Initially, Ayşe attempted to translate what Semra said into Norwegian and thus broadcasted Semra's pretend play ideas to the other girls. However, Ayşe soon shifted to the strategies of trying to persuade Semra to speak Norwegian or even exposing Semra's apparent challenges with expressing herself confidently in Norwegian. In Excerpt 1, Ruth bends over to Ayşe to secretly talk about Semra.

Excerpt 1:

1.	Ruth:	vet du hva ºbaharº betyr?
		do you know what ºbaharº means? ((to Ayşe))
2.	Ayşe:	ja:
		ye:s ((nods and looks at Semra))
3.	Ayşe:	<etternavnet> til Semra
		Semra's <surname>
4.	Ruth:	ne::i
		no:: ((playful and doubting voice))
5.	Semra:	jo::
		ye::as
6.	Ruth:	bahar ((says it in a weird way))
7.		((fake laughter))
8.	Semra:	***bahar*** ((says it with Turkish pronunciation, smiling))

In line 1, Ruth secretly asks Ayşe what the word *"bahar"* means. Ayşe answers that bahar is Semra's surname (line 2). As seen in lines 6 and 7, Ruth makes fun of Semra's surname by pronouncing it with a mocking voice and laughing at it. In this way, Ruth conveys that Semra may not be fully accepted as a play partner, while

simultaneously projecting a negative evaluation of an important signifier of Semra's group membership (her Turkish family name). Semra replies to this act of exclusion by proudly stating her name with a Turkish pronunciation, thus accepting and renegotiating the ascribed membership categorization. While Semra defends herself, Ayşe, who also has a typical Turkish surname, remains silent. The different layers of conflict, humor and alliance building inherent in Ruth's utterances may imply a range of possible intentions (e.g. the word as a loophole). Thus, being somewhat caught in the cross-fire, Ayşe may not know how to respond in this situation. Her lack of support for Semra may be seen as an act of mitigation (avoiding to escalate a potential conflict), but it may also be seen as an act of rejecting the indirectly ascribed membership categorization (of being ethnic-Turkish) in this particular setting.

Positioning Oneself as "Competent Speaker", Casting Peers as "Language-Learners"

The girls continue the play. Ayşe walks over to Oda, who is busy working outside the home. As seen in line 1 in Excerpt 2, Semra, who is setting the dinner table, becomes frustrated with the way Ruth and Ayşe have arranged the plates.

Excerpt 2:

1.	Semra:	Å:::H (.) <alt tull her>!
		O:::H (.) <all this nonsense>! ((displeased voice, sits by the table and fixes the laying))
2.	Ayşe:	<alt tull her>
		<all this nonsense>
3.		hva betyr det da?
		what does that mean then? ((comes back into the kitchen and positions herself close to Semra))
4.		((begins to set the table))
5.	Ruth:	KAN DERE SLUT (.) NE::I::!
		CAN YOU STOP (.) NO::::! ((irritated))
6.		((rearranges the table layout))
7.	Ayşe:	hva:::?
		wha:::t? ((looks at what Ruth is doing))
8.	Ayşe:	m:å:h den skal være sånn!
		m:o:h this should be like this! ((irritated, waves her arms at Semra))
9.		ikke sånn som deg!
		not like you! ((shakes her head))
10.		sånn to sånn og to sånn
		like that two like that and two like that ((points to Ruth's rearrangements))
11.		det skal være mere mat!
		it's going to be more food! ((nods to Semra))

When Ayşe hears Semra's complaint about the mess in the kitchen area (line1), she rushes back to Semra and asks Semra what she means in a slightly condescending manner (lines 2 and 3). Ayşe goes on to help Semra set the table correctly (line 4), but then Ruth comes over and expresses her great dissatisfaction with the way the other two have arranged the plates (line 5 and 6). At first, Ayşe is a bit taken by surprise (line 7), but then she follows up on Ruth's frustration by addressing Semra in an accusing manner that is similar to the way Ruth had just spoken to them (lines 8 and 9). Moreover, while Ruth rearranges the table once again, Ayşe over-explicitly explains to Semra what Ruth is doing (lines 10 and 11).

At the beginning of this excerpt, Ayşe seems a bit irritated by the fact that Semra is not communicating her opinions and ideas clearly in Norwegian. Because of the relatively fragile play collaboration (initially it was not a given that Ruth would include Ayşe and Semra in the play with her and Oda), Ayşe may be worried that Semra's problems conversing with the other girls in Norwegian will eventually lead to a situation in which Semra and herself are excluded from the play. When Ruth then becomes frustrated with both Ayşe and Semra, Ayşe rapidly distances herself from Semra by correcting her in front of Ruth. Throughout this play episode, Ayşe continued to put Semra's lack of fluency in Norwegian on display, for instance by revoicing Ruth's explanations to Semra in a teacher-like manner.

Imposing the Monolingual Norm of Speaking Norwegian

In the next excerpt, Oda is busy demonstrating a trap to the other girls. While the girls listen to Oda, Ruth alters the united atmosphere by introducing a level of intrigue. Her idea is that afterwards, she and Ayşe will choose who they want to team up with. Following a discussion about who Ruth wants to choose as her ally, a relatively heated argument evolves between Ruth and Ayşe that is related to where Ayşe should be seated at the table. After some rearrangement, an air of peace is restored, and Ayşe and Semra are finally appropriately seated. However, as seen in Excerpt 3, Ayşe faces a new riddle when Semra once again neglects Ayşe's previously imposed rule to speak only in Norwegian.

Excerpt 3:

1.	Semra:	***xxx*** ((in Turkish to Ayşe))
2.	Ayşe:	kan du snakke <u>norsk</u>?
		can you speak <u>Norwegian</u>? ((to Semra))
((5))		
3.		har du er det er det en jente inni <u>magen</u> din?
		do you have is it is it a girl in your <u>stomach</u>? ((points at a picture on Semra's sweater))
4.	Semra:	***salak mısın?-***
		are you stupid?- ((laughing))

5. Ayşe: KAN DU SNAKKE NORSK?
CAN YOU SPEAK NORWEGIAN? ((her voice sounds firm))

((Confused, Semra looks at Ayşe, and the conversation stops. They remain seated and watch Ruth and Oda, who are busy rearranging a dollbed in the kitchen nook))

6. Ayşe: kan vi ikke spise mat?
can't we eat food? ((singing to Ruth))
7. Ruth: nei nei nei (.) ikke enda!
no no no (.) not yet!
8. Semra: ***Ayşe oyun başlayınca akıllı olacaklar***
Ayşe, when the play starts they must be kind
9. Semra: ***allah-allah!***
god!
10. Ayşe: kan du snake norsk?
can you speak Norwegian?
11. Ayşe: kom!
come on! ((stands up and waves to Semra))
12. Semra: ***nereye?***
where?
13. hvor?
where? ((puzzled, looks at Ayşe))
14. Ayşe: ºkomº
ºcome onº
15. Ruth: nå::h dere skal bare si at at vi (.) at Ruth skal velge Oda [x
no::h you are just going to say that we (.) that Ruth will choose Oda [x

((mumbles grouchily))

16. Ayşe: [ºne:iº
[ºno:º
17. ºjeg skal siº
ºI will sayº ((whispers in Ruth's ear))

When Semra addresses Ayşe in Turkish (line 1), Ayşe immediately responds by asking Semra to speak in Norwegian (line 2). In line 3, Ayşe initiates a polite conversation with Semra in Norwegian about the girl's face that is printed on Semra's sweater. Semra reacts to this move by indicating in Turkish that Ayşe sounds stupid (line 4). Once again, Ayşe corrects her by loudly reinstating the rule of speaking in Norwegian (line 5).

After having waited patiently for a short while, Ayşe suggests to Oda and Ruth that it is time to eat (line 6). This suggestion is refused by Ruth, who wants to postpone the dinner (line 7). Once again, Semra speaks in Turkish to Ayşe, demanding in an irritated tone of voice that Oda and Ruth should try to be friendlier during the rest of the play (lines 8 and 9). Now, Ayşe becomes quite frustrated with Semra, and she demands that Semra follows her out of the playhouse (lines 10–14). Ruth appears to interpret this as evidence that Ayşe is building an alliance with Semra against

her and Oda (line 15). Ayşe, however, put a stop to this suspicion of conspiracy by whispering to Ruth about what she will say to Semra (lines 16 and 17).

Demonstrating Competency in Turkish to Renegotiate Social Status and Belonging

Following Excerpt 3, Ayşe leads Semra over to a corner of the playroom and explains that she should speak and answer others only in Norwegian. When Ayşe and Semra return to the kitchen area, Oda and Ruth are finally ready to eat dinner. However, it does not take long before a new quarrel arises between Ayşe and Ruth about the distribution of the food at the table. In the middle of the dispute, Ayşe gives up and states with a sad voice that she does not want to eat anymore. Ruth responds to this by challenging Ayşe to leave the playroom. Oda intervenes by asking if anyone wants to hold her baby doll. At first, it seems as if Oda has managed to move the conversation toward a more pleasant topic, but as seen in Excerpt 4, a new dispute follows about who should be allowed to hold the baby doll first.

Excerpt 4:

1. Ruth: JA (.) jeg må si deg no
   YES (.) I have to tell you something ((to Oda))
2. ((whispers something in Oda's ear))
3. ok? ((looks at Oda))
4. Oda: hvis dere har rydda ↑rommet så får dere
   you may if you have cleaned the ↑room ((to Ayşe and Semra, sounding like an adult))
17. Ayşe: ((walks over to Semra and whispers something in her ear))
18. Ruth: jeg vet hva dere ↓sa jeg
   I know what you ↓said ((stands next to Oda, who is sitting at the table))
19. Ayşe: hva?
   what? ((stands behind Semra, who is also seated at the table))
20. Oda: <ºikke la dem bestemmeº>
   <ºdon't let them decideº>
21. Ayşe: NE::I
   NO:: ((shakes her head))
22. VI SA PÅ TYRKISK!
   WE SAID IN TURKISH! ((haughty voice))
23. Ayşe: vi sa på tyrk-
   we said in Turk-
24. Semra: ja:: (.) og du vet ikke
   ye::s (.) and you don't know ((challenging voice, looks down))
25. Ayşe: hva betyr>***kazak***<?
   what means >*sweater*<? ((looks at Ruth))
26. Semra: ↑ja (.) gjett ↑da!
   ↑yes (.) guess ↑then! ((challenging look at Ruth))

After some quarreling about who should be allowed to hold the baby doll first, Ruth walks over to Oda and whispers in her ear (lines 13–15). Probably based on the ideas Ruth had projected, Oda states in a motherly tone that Ayşe and Semra must arrange their rooms before they are allowed to hold the baby (line 16). Upon this defeat, Ayşe takes action by whispering secretly to Semra (line 17). Ruth and Oda express their suspicion that Ayşe and Semra are saying something bad about them (lines 18 and 20), but Ayşe and Semra vainly announce that they are speaking in Turkish (lines 21–23). In addition, they confront Ruth about her lack of Turkish language skills (lines 24–26).

As seen in Example 1, Semra was very quiet and only addressed Ayşe in Turkish, while Ayşe consistently attempted to persuade Semra to speak in Norwegian throughout this play episode. This act of persuasion was sometimes conducted in a motherly tone, but when the other girls were present, Ayşe was the first to expose Semra's lack of comprehension with questions like "Can't you speak Norwegian?" With this attempt to dissociate herself from Semra, Ayşe seemed to be torn between the endeavor to include Semra in the play on the one hand and to avoid being excluded from play with her Norwegian-speaking peers on the other. However, when a new dispute evolved between Ruth and Ayşe, Ayşe utilized the Turkish language to position herself in the conflict with Ruth.

At first, when Ayşe's experience of conflict was related to Semra, her use of the Turkish language was treated as something that indicated a lack of competency. However, when conflicts and coalitions changed, the Turkish language was used by her to build an alliance with Semra, defend them, and demonstrate competency vis-à-vis Ruth.

FIFTH-GRADE PEER PLAY

In fifth grade, the main interest of the girls in Ayşe's class was to bring their private records to school to rehearse their dance moves during the breaks. When the class was having a social event, the girls were often allowed to perform these self-created dances. Ayşe and her best friend Emine were very much interested in imitating their favorite Turkish girl-band, which embodied a mixture of more traditional Turkish music and modern pop music. The second example (Example 2) is drawn from one of these dance rehearsals. Ayşe is in the classroom with Oda (from Example 1) and Emine (both of whom had attended Ayşe's preschool class), as well as with the two other Turkish-Norwegian-speaking girls in class, Yesim and Nur. Our observations in class revealed that Ayşe and Emine spent most of the day together, either alone or together with the other girls in class. When the four Turkish-Norwegian-speaking girls, Ayşe, Emine, Yesim, and Nur, were observed alone together, they would speak almost entirely in Turkish. However, when observed in the full class setting, Asiye more often initiated conversations with non-Turkish speakers, and she relied more on Norwegian with her Turkish-Norwegian-speaking peers. Emine, Yesim, and Nur showed a clearer preference for Turkish across situations. Thus, in their informal

conversations during classroom lessons, Emine would typically address Ayşe in Turkish, while Ayşe would answer her in either Turkish or Norwegian, depending on contextual factors such as the conversational content (e.g., the sensitivity of the topic) and audience (taking into consideration both active and non-active listeners).

Contextualizing Conflict and Compliance Through Language Alternation

In example 2, the girls are creating a dance accompanied by the music of the Turkish girl-band Hepsi. The four Turkish-Norwegian-speaking girls are very much interested in imitating the scenic roles of the four singers in the band, while Oda is trying to fit into the group with her street-like dance moves. In the middle of this rehearsal, Yeşim forgets her next move, which leads to confusion among the other girls. Watching Yeşim's desperate attempts to get in step with the others, Emine begins to giggle. Yeşim becomes irritated and announces in Turkish that it was Emine who was in the wrong place. Emine, on the other hand, addresses Yeşim in Norwegian when explaining the moves to her. As seen in Excerpt 5, line 1, Emine seeks support from Ayşe in this dispute.

Excerpt 5:

1. Emine: ***Ayşe bu herşeyi [karştırdı***
   ((laughing)) *Ayşe she has messed[everything up*
2. Yeşim: ***[hayır sen benim arkamda [değil miydin?***
   [no [were you not in front of me? ((to Emine))
3. Emine: [>↑nei(.) du skal bak
   [>↑no (.) you should be behind
4. Emine: [se<=
   [look<= ((to Yeşim))
5. Yeşim: ***[ben şura (ya) geldim=böyle oldu=***
   [I came here so it was =like that=
6. Emine: =se du hit (.) og hit
   =look you here (.) and here ((shows Yeşim direction))
7. Emine: >er det kjempe vanskelig?<
   ((chuckling)) >is it very difficult?< ((in a mocking voice))
8. Ayşe: <IKKE SANT?>
   <ISN'T IT?> ((to Yesim, mocking voice))
9. Yeşim: ***<yapamıyorum bak ses çıkmıyor ama!>=***
   <I can't hear there is no sound!>= ((frustrated, flips fingers and pretends to plug in ear-plugs))
10. Ayşe: =>VI SKAL IKKE DET ↑YESIM!<
    =>WE ARE NOT DOING THIS ↑YESIM! <((irritated))
11. Yeşim: ja (.) sånn?
    yes (.) there? ((pretends to take out the "ear-plugs," makes some dancing moves to please Asiye and waves to her))

Emine seeks Ayşe's support by complaining about Yeşim in Turkish (line 1). However, she does not get an immediate response from Ayşe. When Yeşim upholds her position that she did not do anything wrong (lines 2 and 5), Emine alternates to Norwegian to demonstrate the right moves to Yeşim (lines 3 and 4), simultaneously putting her mistake on display (line 7). Finally, Ayşe joins Emine in the opposition, insisting in Norwegian that Yeşim is wrong (lines 8 and 10). Yeşim, then, seems to realize that she has lost the argument. For the first time, she alternates to Norwegian while she demonstrates the dance moves to Ayşe in a compliant manner (line 11).

In this excerpt, Emine and Yeşim's confrontation is contextualized by their contrasting language choices: while Yeşim sticks to her preferred language, Turkish, Emine, quite surprisingly, uses Norwegian when opposing Yeşim. By using Norwegian in this situation, Emine appears to distance herself from Yeşim during the dispute. Emine may also try to support Ayşe in her endeavor to speak Norwegian, the common language in play. However, when Emine seeks an alliance with Ayşe, she alternates to Turkish. As was often seen in the conversations between Ayşe and Emine, Ayşe did not respond when Emine addressed her in Turkish in the context of non-Turkish speakers. Later on, however, Ayşe joins the opposition against Yeşim in Norwegian. It is interesting to note that when Yeşim decides to regain peace with the others, she alternates to Norwegian to signal her compliance.

Using Language to Mark Peer Affiliations

After the preceding conflict, all the girls collaborate to restore the sequence of moves so that they can proceed with their dancing. Oda suggests a new move, and everybody seems to be excited. Ayşe demonstrates the move to Nur in Norwegian, but when Nur has a difficult time repeating the move, Ayşe alternates to Turkish in order to make sure that Nur has the sequence of moves correct. In Excerpt 6, Oda becomes increasingly frustrated because it is difficult for her to fit her moves into the dance. She tries to stop the music, but she is persuaded to try the dance again. The dancing proceeds for a couple of minutes, but the rhythm is lost. Oda then asks for an easier song. As seen in lines 1 and 2, Emine and Ayşe are willing to accommodate this request.

Excerpt 6:

1. Emine: =ja en lettere (.) xxx er den ↓letteste=
   =yes an easier (.) xxx is the ↓easiest= ((xxx is probably the name of a Turkish song that she considers to be the easiest one))
2. Ayşe: =<men- ↓ja>=
   =<but- ↓yes>=
3. Yeşim: =↑***hayır o oyun dört ↓kişilik***
   =↑no, this song is for four ↓persons
4. Emine: >hallo he he↓okey<=
5. Ayşe: =<xxx fire ↓stykker>
   =<xxx four ↓persons>

6. Yeşim: >det går ikke-
>it won't work-
7. Ayşe: [det ↓går
[it ↓works
8. Emine: [>okay vi må finne en annen sang da<
[>okay, we have to find another song then<
9. hvis du ↓vil
if you ↓want ((to Oda))
10. Yeşim: xxx
11. Ayşe: <ne:i->
<no:-> ((to Yeşim))
12. Yeşim: >***yavaş bi tane şarkı vardı xxx şey yapın bi (.) Bİ↑KARIŞTIRIN!<=***
>it was a quiet song xxx do something like (.) A BIT ↑EASY!<= ((to Asiye))
13. Ayşe: =↑NEI!
=↑NO! ((to Yeşim))
14. Yeşim: >***xxx (.) sen bassan<=***
>xxx(.) press the button<= ((to Nur, about CD-player))
15. Emine: =Nur ok (.) gå
=Nur ok (.) go ((waves her hand sending Nur to the CD-player))
16. Ayşe: <eh (.) men (.) hva mener du ↑lissom?>
<eh (.) but (.) what do you mean ↑like?>
17. Oda: <en som er litt lettere so:m>
<one that is a bit easier tha:t>
18. >at en for eksempel får stå og xxx °hva jeg skal ↓gjøre°<
>that one, for example, can stand and xxx °what I am supposed to ↓do°<

Although the foregoing discussion with Oda was conducted in Norwegian, Yeşim uses Turkish when opposing the idea to change the song (line 3). Yeşim's argument that the song they are dancing to is only for four persons, may imply that her perspective is that Oda's collaboration and participation is not necessary for the dance to continue. Furthermore, the alternation to Turkish marks an exclusion of Oda from the ongoing debate. Ayşe confronts Yesim in Norwegian, claiming that the five of them can dance together (lines 5, 7, 11, 13). By responding Yeşim in Norwegian, Ayşe both signals willingness to include Oda in the discussion and demonstrates a distance to Yeşim. Then, she addresses Oda to find out what she wants (line 16). Oda explains that she wants to dance to a song where she knows what to do (lines 17, 18).

Signaling Alignment by Upholding the Monolingual Norm

The girls start to rehearse the dance accompanied by another song from the Hepsi-album. However, it does not take long before new troubles with the sequence of moves surface. As seen in excerpt 7, lines 1 and 2, Emine initiates a discussion related to the sequence of moves.

Excerpt 7:

1.	Emine:	***>↑AMA <u>DINDINDINT</u> diye çıkıyor biz yukarı↓çıkınca***
		>↑but when IT SAYS <u>DINDINDINT</u> we come ↓up ((to Ayşe, dindindint is a melody))
2.	Emine:	***>biz çıktıktan sonra bıieyler ↓yapacağız<***
		>when we come out we have to do ↓something< ((Ayşe))
3.	Ayşe:	hvem kan være (.) hvem kan være i midten?
		who can be (.) who can be in the middle?
4.		vil du?=
		do you want to? =((to Emine))
5.	Emine:	=>nei (.) jeg vil ikke (.) men der er det↑sånn-
		=>no (.) I don't want to (.) but there is like ↑this-
6.		***AMA orda böyle<-***
		((comes closer to Ayşe)) *BUT it is like this<-*
7.	Ayşe:	>da skal du gjøre ↑sånn liksom<
		>then you will do like ↑this< ((shows a move))
8.		<sånn snurrer dere [↓rundt>
		<so turn yourself [↓around>
9.	Emine:	[ja-=
		[yes-= ((looks at Ayşe))
10.	Ayşe:	=<u>også</u> skal dere stå bak ↓sånn
		=<u>and then</u> you will stand back ↓here
11.		også skal finne på noe [↓her
		and then will figure something out [↓here
12.	Emine:	[↓ja-
		[↓yes-

Emine wants to discuss the sequence of moves with Ayşe and addresses her in Turkish. By doing so, she excludes Oda from this conversation (lines 1–2). Ayşe ignores Emine's questions and, instead, asks Emine in Norwegian whether or not she wants to dance in the middle (lines 3, 4). Emine alternates to Norwegian and says that she does not want to do that, but then she moves closer to Ayşe and tries to start a conversation with her in Turkish (line 5). Once again, instead of answering Emine, Ayşe instructs everybody present about what they are supposed to do in Norwegian (lines 7, 8, 9, 11). Finally, Emine gives up her attempts to start a conversation between only the two of them and alternates to Norwegian as well (lines 9, 12).

By switching to Turkish when addressing Ayşe in this excerpt, Emine (deliberately or unconsciously) dismisses the unspoken rule to speak the common language Norwegian in this setting. However, via her consequent choice of Norwegian, Ayşe manages to reinstate this rule and include Oda in the ongoing discussion. Finally, Emine offers her compliances in Norwegian.

Ayşe's consequent use of Norwegian throughout this dance rehearsal signals her concern to include Oda in the conversation. Although the Turkish-Norwegian-

speaking girls, seems to be aware of this expectation (as seen in the tendency to witch to Norwegian to signal compliance with Ayşe, excerpt 5 and 7), they often use their preferred language Turkish in the flow of the interaction. Interestingly, this leaves Ayşe the main role of negotiating a common understanding in this peer group. Even though Ayşe uses Turkish to explain the dance moves to Nur, she usually does not follow the code when her peers address her in Turkish. Thus, this language choice subtly functions to mark an attempt to align with the identity of Norwegian. Even when her best friend, Emine, addresses her in Turkish, Ayşe responds in Norwegian (excerpt 7).

DISCUSSION

Ayşe grew up in a neighbourhood and attended classrooms (in preschool and school) with a relatively large share of Turkish-Norwegian-speaking children. As the examples of the present study demonstrate, this co-ethnic concentration afforded the Turkish-Norwegian-speaking children the possibility to use and maintain the heritage language to a large extent. At the same time, this situation generated a parental concern related to whether the children would get enough exposure to the Norwegian language (as seen in the interview with Ayşe's parents). Although the characteristics of the community and the language ideologies surrounding Ayşe are not directly analyzed in the present study, these contexts are important backdrops for understanding how Ayşe negotiated to align or disalign with the linguistic categories (or membership categorizations) that were made relevant in the interactions with her peers.

With regard to the manner in which Ayşe (and the other girls) made linguistic differences relevant in their negotiations vis-à-vis peers, we want to highlight two important issues. First, the use of the heritage and majority languages is closely connected to contextual factors, such as the language competencies of the people participating in or listening in on a specific conversation (e.g., considering peers who do not know the heritage language), the task at hand (e.g., explaining something to a peer in the language she prefers), and the norms of language use in various situations (e.g., being told by adults or peers to speak in one language). Across our observations, Ayşe demonstrated a great sensitivity to these aspects of language use. She appeared to take on the responsibility of negotiating between the peers who preferred to speak Turkish and the peers who did not speak Turkish, both in preschool and in the fifth grade. In this way, Ayşe clearly embodied the ability to "commute" between languages, as her mother phrased it in the interview. Thus, Ayşe's ability and willingness to flexibly alter between Turkish and Norwegian across situations seemed to position her as a language-mediator in class.

Second, the present study contributes to the existing literature on how linguistic categories are drawn upon as tools to negotiate social status and belonging within peer groups (e.g., Aarsæther, 2003; Cromdal, 2004; Evaldsson, 2005; Jørgensen, 1998). In preschool, this was largely accomplished by explicit references to

language use (e.g., Ayşe continuously told her peer Semra to speak Norwegian). In fifth grade, the significance of language was more subtly communicated through language alternation and preference. Importantly, the linguistic categories appeared to be introduced and made relevant in situations in which power relations were at stake (e.g., creating or dissolving alliances), suggesting that these categories were perceived by the girls to be emotionally and socially significant. As seen in Excerpt 4, Ayşe and Semra gloated about their Turkish language skills when they were threatened to be excluded from the play with Oda and Ruth. Moreover, in Excerpt 5, Emine used Norwegian when building her argument in the conflict with Yesim, but alternated to Turkish when she attempted to seek backing from Ayşe. It is interesting, that Emine used Norwegian when addressing Yesim (Excerpts 5 and 6), although she seemed to prefer Turkish in most conversations affording this possibility. By using Norwegian in this particular setting, Emine may pledge alliance with Ayşe and simultaneously position herself as a "more competent speaker of Norwegian" in her discussion with Yesim. This is similar to the way Ayşe positioned herself vis-à-vis Semra in Example 1.

Ayşe's strategies in both preschool and the fifth grade suggest a tendency to prefer (and value) Norwegian over Turkish in class. During the lessons in fifth grade, Ayşe refrained from responding to Emine's initiatives until Emine altered her language use from Turkish to Norwegian. This was also seen in Excerpt 7, in which Emine switched from Turkish to Norwegian in order to obtain a response from Ayşe. These examples illustrate how language choice in interaction both constitutes and reflects participants' identities (see Gafaranga, 2001) and may be used to ascribe, accept, and reject membership in groups (Cashman, 2005). Thus, while previous studies have documented how language alternation functions as a contextualization cue, arguing that the direction of the switch may be of secondary importance, the bilingual interactions of the present study also underscore the values children ascribe to a particular code (or language).

Bakhtin's (1981, 1986) metaphor of chronotope designates how the world is represented and appropriated within multivoiced (and multilayered) contexts, stretched out in indefinite time. In this view, an utterance is part of a potentially endless chain of signification, one that stretches in the distant past and anticipates responses in the distant future. Transferring this idea to the interactions analyzed in the present study, children's language use and expressions of identity depend on and may be constrained by the specific contexts in which they participate. In the play situation from preschool, the demand to speak in the common language Norwegian appeared to limit Semra's possibilities to express her view-points. Similarly, Oda was the only non-Turkish speaker in the dance rehearsal in fifth grade and she seemed highly uncertain about how to perform the imitation of the Turkish pop-band. These situations illustrate the point made by Brown and Renshaw that chronotope alerts us to the struggle for influence within dialogues "where learning to speak within a particular community means exhibiting mastery in constructing utterances privileged within the history of that community" (2006, p. 258). In

addition, chronotope provides a way of viewing participation as a dynamic process in which children contribute to renegotiate these contexts within specific peer relationships. In Example 1, Ayşe attempted to suppress Semra's use of the Turkish language in a situation in which their inclusion in the play (and their current and potential future relationship with the Norwegian-speaking peers) was threatened. Later on, however, Ayşe allied with Semra and used the Turkish language to defend them (Excerpt 4). Semra's insecurity about speaking Norwegian was put on display, but simultaneously she exhibited a firm pride in the Turkish language – for instance when she pronounced her surname with a Turkish accent in Excerpt 1 and challenged Oda's and Ruth's lack of Turkish skills in Excerpt 4 (see also Cekaite & Evaldsson's, 2008, description of how students in their study both instantiated and challenged the monolingual norm of speaking Swedish).

Because of the multivoiced and open characteristics of dialogues, utterances may convey a range of intentions and meanings which again may be populated by the intentions and interpretations of others. This "loophole" affords speakers the possibility to alter the final meaning of their own or others' utterances. In the present study, such layering of talk was evident, for instance, in the way Ruth indeterminately introduced the topic of Semra's surname (Excerpt 1) and the way Yesim subtly suggested that they did not need Oda to perform the dance, closing the conversation from her by speaking in Turkish (Excerpt 6). In complex ways, children create unique peer cultures and reconstruct the perception of themselves in relation to others within these relationships. Children are not simply reproducing the language ideologies that are communicated to them by parents or teachers. Linguistic differences become meaningful to children to the extent that they perceive them to be significant in their social world. Thus, as social actors in preschool and school, children engage in complex regulatory processes in which they monitor and shape their own and others' behavior in relation to linguistic differences. In this way, children's language use and activities are deeply intertwined with their understanding of themselves and others.

Transcription Key

The following key is a modified and simplified version of the transcription conventions of CA (Conversational Analysis).

Norwegian	utterance in Norwegian
Translation	translation from Norwegian to English
Turkish	utterance in Turkish, reproduced in bold font and cursive
Translation	translation from Turkish to English, reproduced in cursive
((text))	non-verbal activity/observer's comment, for example ((nodding))
xxx	inaudible word
(text)	guessing of an unclear utterance
(.)	micro pause
(5)	pause in second
!	rising tone

?	question
.	full stop/falling tone
>text<	quick pace
<text>	slow pace
[text]	demarcates overlapping utterances
=	utterances are linked to each other without audible pause
-	abrupt cut-off
°text°	speech in low issue
text	stressed syllable or word
↑↓	rising/falling shifts in intonation
:	prolonged sound

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NOTES

[1] Freedman and Ball (2004) discuss the concept of *ideological becoming*. The Russian word *ideologiya* is less politically colored than the English word *ideology* and may refer to an individual's belief system.

[2] Overall project title: Development of text comprehension in young children.

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11. BELIEFS, EDUCATION AND PLURALISM

A Discussion of Concepts – and the Importance of Who "We" Are – in a Public Debate

IDENTITY AND OTHERNESS IN A PLURALISTIC SOCIETY

Political discussions and decisions do not only produce laws, organizational structures or budget resolutions. They also contribute to the production – *the construction* – of shared ideas and understandings, such as understandings of identity. Public organizations, by their structures, purposes, content and methods, do also contribute to these understandings. Schools are such public organizations. This chapter is a discussion of how one area of educational content, that is religious, ethical and life stance education, as it is discussed in political debate, relate to the construction of ideas of collective identity and otherness in a society.

The case discussed is Norwegian. The empirical basis for the discussion is the debate in Norway in the 1990s, compared to recent developments. Some historical background will be presented and brought into the discussion. For readers unfamiliar to Norwegian politics, education and history, this could serve as a short introduction to the field. However, the main focus of the chapter is to show how and what kind of discursive constructions of identity and otherness that emerge in this particular material. Further, it will be shown how these concepts contribute to an understanding of plurality.

This is an interpretation of the Norwegian case.[1] It can also be read as a suggestion of ways to analyze and read other, also non-Norwegian – or non-educational – debates. Finally it can be read as an example of how to use these analytical tools on some discursive material. My claim is that focusing on the way public discourse contributes to the constructions and verifications of ideas and concepts that make up the very picture of what is "real" or "true", is a liberating and democratic contribution from this kind of research.

INTRODUCTION TO THE FIELD

From its very beginning religious education was the primary purpose of Norwegian compulsory education, as in a range of other national school systems. Over the years the role of religious education has changed, but it still occupies a central position in the curriculum and in the political debate on education. A broad national debate

E. Bjørnestad & J. Heldal Stray (Eds.), New Voices in Norwegian Educational Research, 149–164.

in the 1990s focused on the topic, as a new school subject (KRL) was designed, discussed and eventually changed. This debate brought on one hand forward an idea of a strong and unchanging national identity, deeply connected to the Evangelical Lutheran state church and to an impression of a harmonious and monocultural past. On the other hand, there were voices in the debate that focused on the need to develop a school less connected to one particular church and one particular belief and more oriented towards letting pluralism be the framework of the common school.

The political and public debate in the 1990s had its obvious limitations. The school subject that was created and discussed in these years, was judged to be in contradiction to central human rights by both the UN Human Rights Committee (in 2004) and by the European Court of Human Rights in Strasbourg (in 2007). Still, this educational debate must be said to have opened up the scene for several further discussions in the years to come in the field of education and religion/life stance. Initiatives were made to actually discuss and make changes and to question old decisions and arrangements, thus new debates were made possible. However, as this text will show, new discussions were still to a large degree taking place within old frameworks made up of established ideas and understandings.

In 2008 the political debate led up to a change of the objects clause (Art. 1–1) of the Law of Education.[2] Changing this clause was a step that ten years earlier was defined as irrelevant by the majority in the Storting. The content of the actual change can be discussed, and will be further down in this text, but the fact that a change was actually done, was important in itself. It showed that what was earlier presented as a preserved and protected foundation, could be changed through political action.

In January 2013 a commission appointed by the Norwegian government presented an extensive report on religion and life stance policy in Norway (NOU 2013:1). This report is meant to be a fundament for a public and political debate in the coming years. Public institutions, such as schools, are central to this discussion. The commission has also given children a special position in the report, both the protection of children and the securing of children's own rights to freedom of belief.

This chapter will first present a short view on the historical background going back to the start of compulsory schooling in Norway. Second, it will present a short review of an analysis of the debate on religious/life stance education in the 1990s. The further discussion in the chapter will be related to recent political debate on issues related to education and religion and beliefs. Public schools are a central example of public institutions that call for reflected debates on how freedom of beliefs and other societal considerations should be handled. One important question in the contemporary political debate is how Norway can manage its long history of one majority church with all its consequences for how public life is organized – in an age of pluralism. This question is an important background to this chapter.

The title of this chapter refers to the concept of pluralism. Regardless of academic analyses, naming the contemporary Norwegian society as a pluralistic society is not uncontested in current politics. In public debate the concept of pluralism – when it comes to Norway – is met by voices that declare that Norway instead is a "Christian

and humanistic society". That is – not a pluralistic society – but a society still deeply connected to these declared Christian and humanistic roots. This chapter will relate this discussion to the question of whether there really is a larger acceptance of pluralism in society in general and in education in particular.

Identity and otherness are here understood as discursively constructed concepts.[3] As such, they are to be counted as outcomes of the public debate and political discussion in a field – such as the field of education. Building on a discursive analysis means that concepts and common understandings (i.e. understandings of "normality", "sameness", or "challenges of the contemporary" etc) are seen as constructions made through discourse.

Collective identity, the idea of who "we" are, is an ever-changing, historically and discursively constructed concept. It is, however, often used as a reference to who the "real" members of a society are, and thus it is often used as an unchanging and primary phenomenon.

Otherness is thus the contrast to identity; it refers to those who do not belong to the group of "real" members of a society.[4] It is the construction of "the others". Central to theories of identity and otherness is that it is this very contrast that makes the construction. Without such a contrast as "the others", identity could not be constituted:

> Throughout the exchange between Europeans and their "others" that began systematically half a millennium ago, the one idea that has scarcely varied is that there is an "us" and a "them", each quite settled, clear, unassailably self-evident. As I discuss it in *Orientalism*, the division goes back to Greek thought about barbarians, but, whoever originated this kind of "identity" thought, by the nineteenth century it had become the hallmark of imperialist cultures as well as those cultures trying to resist the encroachments of Europe. (Said 1993: xxv)

Declaring identity and otherness as interdependent concepts – instead of being independent, essentialistic and eternal "real" concepts, with an unchanging history – is a theoretical choice. It is a choice that leads us into an understanding of concepts of identity as changing, formed by man, history and discourse. I see this angle of research and analysis as a promising and exploratory angle for investigating a politically highly debated area – such as for example religion/life stance and education.[5] It deconstructs established constructs and gives thereby room for further discussions and political choices for the future. Constructions matters, and the disclosure of constructions matters.[6]

THE LONG STORY – AND A DISCUSSION OF NATION-BUILDING

It is easy to interpret the development of one unitary school for all children, regardless of class or abilities, and the development of national curricula, as important bricks to the Norwegian nation-building. The core task of the Norwegian school was – and

is – to educate Norwegian citizens. But what is a Norwegian citizen; how do you educate Norwegians?[7]

From the very beginning of compulsory schooling, this education consisted of religious education. To be a proper citizen one had to pass confirmation in church, the Evangelical Lutheran state church. Confirmation was made mandatory for all citizens from 1736. Basic religious education was then required to be able to pass the oral examination prior to confirmation. The purpose of schooling was thus double – the child or youngster was to be a Christian and receive salvation. But it was also necessary to be a proper Christian, that is having been through confirmation, in order to obtain worldly rights connected to adulthood, such as the right to get married or the right to get a job outside home.[8] A third aspect was how this education of the young also taught them to accept their place in society, and formed good and obedient citizens. For all of these reasons, confirmation was necessary, thus religious education was necessary. And the Danish-Norwegian king Christian VI ordered school for all in 1739.[9]

The school's sole task from the beginning was thus religious education. The skill of reading was learnt to read the religious texts. This was what the young members of society needed in order to be adult members of society. The national aspect was subordinate in this period.

Norway became a semi-independent state after the Napoleonic wars, by an independent constitution in 1814 and an elected Parliament (the Storting). The long-lasting Danish-Norwegian unit was history – and a hundred years of personal union with Sweden started instead.[10] But the seeds of full independence had been sawn – and a century of national awakening started. It became important to many to formulate and understand what was the Norwegian identity, also in contrast to "the others" (such as for example Sweden and Denmark). Connected to this process, and in general to the process of modernization and new knowledge requirements, the discussion evolved around what actually constitutes the important values and knowledge that should be transmitted in Norwegian schools.

Religion has had different functions in this search for the Norwegian identity. Contrary to the way recent debate (see below) presents "the Christian" and "the national" as two sides of the same coin, the religious and the national were not a constant pair in the 19th century debates.[11] The debate around P.A. Jensen's reading book in the 1860s, which launched patriotism as a central value, illustrates this. Emphasizing the national as the common ground for all citizens, independent of religion, gave an opening for a greater religious freedom. This was, however, seen as a possible threat against established truths and this conflict contributed to the pietistic resistance against the worldly and the national. The bishops and the professors of theology did not necessarily support the ideas of a national awakening. There was a fear that this would threaten the religious unity and dominance and cause social disorder.

Another aspect of the relationship between the religious and the national was the treatment of dissidents. Religious freedom, the right to choose one's own religious

conviction and belonging, was not a part of the Norwegian constitution in 1814. It was the already established state church that constituted the fundament for the new state. This was in line with the established practice in which one religion was pointed out as the state's religion, and in which the ensuring of the right belief for all people, i.e. through school and confirmation, was one of the government's central assignments. The religion was decided from above. Other beliefs were irrelevant and forbidden. Jews and Jesuit monks were not allowed to enter the country, and Norwegians could not leave the state church.

Several years later, in 1845, the Law on Dissenters gave Norwegian citizens legal right to choose to leave the state church and under certain conditions join other Christian congregations. Until then this was not allowed. Freedom of religion was not made an explicit part of the Constitution until 1964.

In this way religion – based on the Lutheran state church – did play a major part in the nation building, as it was the only belief that was supported by the state. But if we look for the nation and nationalism as a uniting factor independently of this religious unity, that was a much later phenomenon, gradually growing in the 19th century. The real uniting of religion and nation as "two sides of the same coin" came even later, in the 20th century, still as a contested unity. But as we will see in the next part of the chapter, this intertwining of nation and religion, with religion understood as Lutheran Christianity, and arguments based on a declared long historical background for this intertwining, have been used extensively in the political debate on religion in public schools, as in the debate in the 1990s.

The nation's history – and the history of education within this framework – show us a history and a society where for centuries there was little room for doubts or debate on who "we" are, and what "our" relation to religion and belief is or should be. The religion was declared and given by law and regulations. Other choices were forbidden. Religion was not an individual's choice or conviction, it was a mandatory consequence of citizenship, tradition and law. In this way religion and religious identity preceded national identity by far also when it comes to what common ground should be and was taught in schools. This is the "long story".

THE SHORT STORY – AND A DISCUSSION OF PLURALITY

Having drawn some long lines of educational history since 1736, I will here concentrate on an intensively fought political debate regarding religious and life stance education in the Norwegian public schools in the 1990s. The purpose is to show what constructions of identity and otherness can be found in this debate, and what they mean for the understanding of pluralism at that time.[12]

Several educational and societal debates resulted in a political decision to establish a new school subject – KRL – "Kristendomskunnskap med religions- og livssynsorientering" (Knowledge of Christianity with orientation on religions and life stance). This was part of a larger change of the educational system in the 1990s, but by far one of the most debated issues. The subject replaced the old school

subject Christianity and it also replaced the established possibility to choose not to participate in this subject. The curriculum prior to the change in 1997 also opened for the possibility to choose life stance education. This right to choose, and the right to be exempted from the subject of Christianity education (the exemption right), was taken away when the new subject, KRL, was established.

The political debate included argumentation that presented a somewhat threatening understanding of the contemporary society. Parallel to this contemporary threat, there was a construction of the past that presented the past as a harmonious and homogenous unity, where Christianity was a core aspect of being a Norwegian. The treat of the contemporary was connected to the dissolvement of this homogenous heritage. And the threat was understood to require substantial political action. The political action resulted in the new school subject.

As illustrations of this interpretation of the majority voice of the debate, I will show a few examples of texts from this debate.[13] First, an example from the governmental mandate for the commission that worked out the initial report (NOU 1995: 9) on these issues.[14] This text describes the kind of contemporary society that the commission's work was meant to deal with. It is a threatening picture, where the old truths and institutions are disturbed, and the young people are left alone without guidance:

> Det rugges ved etablerte sannheter og gamle institusjoner. For barn og unge kan endringene og de hurtige skiftene gi et inntrykk av moralsk relativisme. Når rett og galt eller takt og tone ikke i samme grad er gitt eller delt, blir mange barn og unge overlatt til sin egne etiske famling. Barn og unge utsettes for mange og kryssende impulser, med en overflod av informasjon og med trykk fra hele verden mot den lokale og nasjonale kultur. De unge utsettes dermed også for mangfoldige og motstridende verdipåvirkninger. Dette forsterkes av tendenser til sekularisering og pluralisering, hvor tro, religion og kirke ikke utgjør noe enhetlig eller entydig bilde. (NOU 1995: 9: 80)[15]

Second example is from the Storting's handling of the central principles of the ongoing changes of the educational system. The text is a common remark from the parties Arbeiderpartiet, Senterpartiet, Høyre and Kristelig Folkeparti, which made up a solid majority. They describe the challenges of the contemporary, by pointing out the transition from homogeneity to a more multicultural society:

> Flertallet mener at utfordringene til skolen er blitt større gjennom de omfattende samfunnsendringene i vår tid. Norge er i forandring fra et svært homogent samfunn til et mer flerkulturelt samfunn ved et økende innslag av folk fra andre land, med annen etnisk bakgrunn og med andre trossyn. Mye tyder på at kontakten mellom generasjonene er blitt mindre og forankringen i historie og tradisjon svakere. De unge utsettes for omfattende og kryssende verdimessig press gjennom moderne massemedier, fjernsyn og video. Virkningene av disse ulike strømmer samles og fortettes i skolen, som dermed får en større oppgave når det gjelder å utvikle forståelse, toleranse og samhold på tvers av de ulike gruppeskiller. (Innst. S. nr. 15 (1995–1996): 16–17)[16]

The new subject was introduced, based on these kinds of arguments. But the debate continued. The very dissolvement of the exemption right by the introduction of one mandatory subject for all in this field, was the core of the intensive struggle that developed. This is therefore a good angle for an attempt to describe the composition of plurality as it appeared through the majority voice, that is, the arguments of the decision makers in the debate.[17]

In this discourse, collective identity is presented as an undisputedly valuable factor. It is presented as something which gives an experience of belonging and it is said to contribute to the ability to perform in society. In this particular debate, collective identity is presented with two central labels, namely "the Norwegian" and "the Christian". The latter is further specified as Evangelical Lutheran Christianity. The emphasis is, however, on Christianity as a cultural heritage, not as a belief. The word "belief" is treated as a cultural element. This fundament is also specified as something particularly Norwegian. I will show two examples from the Storting:

> Det breie fleirtalet la stor vekt på dei kristne og humanistiske verdiane. Vidare er det og mellom anna lagt vekt på at kjennskap til norsk tru, slik ho kjem fram i historia og notid, er ein føresetnad for alle elevar i skulen, på line med kjennskap til norsk språk, historie og kultur. (Innst. S. nr. 93 (1994–1995): 1–2)[18]

> All vår kultur bygger på folket si livssynsmessige forankring og kan vanskeleg stå som nøytral i høve til folket si tru eller trusførestelling […]. Kristendomen har dei siste tusen åra prega vårt samfunn. Den har gitt oss ein kulturarv og ein trusarv, den har planta eit nytt sett radikale verdiar som omsyn for vår neste og vern om den svake inn i vår historie. Desse verdiane har fram til i dag vore eit viktig berelag for utviklinga i landet vårt. (Jørgen Holte, Senterpartiet. Stortinget 07.03.1995: 2406)[19]

This declaration of collective identity, with all its specifications, points out a dividing line between "us" and "the others". "We" are generally the established unit, while "the others" are the newcomers. "We" are inside, while "the others" come from the outside. "We" have something valuable, something "the others" lack.

This last claim leads up to how this whole argumentation in many ways can be read as a welfare state discourse. Religion, in its specific Norwegian, Evangelical Lutheran, cultural-heritage variety, is presented as a piece of cultural goods that should be distributed evenly and just – between all citizens, because this is reckoned as fair and right. And basically this means that the privileged majority (the established "we"), who are members of the Norwegian church, should share as much of some sort of Evangelical Lutheran cultural heritage with "the others". The goods should be shared.

We can see this in this joined remark from the four parties Arbeiderpartiet, Senterpartiet, Høyre and Kristelig Folkeparti:

> Flertallet mener at det er en kollektiv kulturell identitet en bidrar til å bygge opp gjennom et felles kunnskaps-, verdi- og kulturgrunnlag. Dette har intet

> å gjøre med overgrep mot minoriteter eller tvang til tro. Poenget er først og fremst at alle – så langt som mulig – skal sikres det samme utgangspunktet og de samme mulighetene for aktiv deltakelse i samfunnet. Derfor kan en slik felles, kulturell identitet tjene minoritetenes samfunnsmessige og demokratiske interesse. (Innst. S. nr. 15 (1995–1996): 17)[20]

My claim is that behind this huge political and public dispute, with all its different voices, debates, court cases and ending in international human rights bodies, there is one central question: How far can the majority go, when deciding on behalf of minorities when it comes to the decisions on values and identity? Can the majority actually select the "good values" and "the good identity" for the minorities? Or is this a right that belongs to the minorities themselves and in the end to the individual? The solution in the 1990s was to let these questions on common identity be decided by majority vote. That caused protests and political fights.

Central to the argumentation behind the new KRL-subject was the idea of threat. Mass media, commercialism and globalism were seen as threats to the Norwegian unity and identity. The new subject, without the earlier practiced exemption rights and explicitly based on the declared heritage from what was seen as a good and united past, was then presented as a way to meet this threat and defend the "real" Norwegian identity.

This identity is often declared as a result of "one thousand years" of continuity in Norwegian history.[21] This description is a strong and relatively uncontested construction in this debate, which is presented as an empirical truth and thus makes it easy to argue normatively for a subject which emphasizes this continuity and unity for everybody. This emphasis on continuity and an everlasting homogeneity underlines the communitaristic constructions in the debate. An example is how individual identity and collective identity are presented as two side of the same coin. We can see this example from the written curriculum (L97): "Utviklingen av den enkeltes identitet skjer ved at en blir fortrolig med nedarvede væremåter, normer og uttrykksformer." (L 97: 19)[22] Thus, according to the majority voice here, individual identity is something which develops when the individual aquires the already culturally defined collective identity. This is the way the "we" of the discourse arises.[23]

I will mention one particular part of the argumentation that contributes strongly to this idea of unity of the individual and the collective. It is the idea of "family communitarianism": The majority of the debate in the 1990s took this as a premise for their argumentation. The family was thus regarded as the smallest unit, the unit that should have a protected right to freedom of belief. The single individual, as the child, is barely mentioned by anyone in this debate in the 1990s.[24] The child is thus just a part of the family.

I will sum up this brief presentation of an analysis of the political debate on religious and life stance education in Norway in the 1990s, by pointing out what this implies when it comes to the composition of plurality. How is plurality composed, what does plurality consist of, within this discursive construction, with its identity- and

otherness-constructions, ideas of an homogenous past and threatening contemporary and with its communitaristic perspective?

We have seen the basic contrast between identity and otherness connected to several central aspects. "The others" are presented as newcomers, coming from "the outside", bringing change and plurality and they are basically presented as superfluous and non-essential to Norwegian culture. The contrast to all of this is thus the "we"-concept, presented with a long homogenous history, referring to those on the inside, those who represent unity and continuity and the core of Norwegian culture. These two construction and all the contrasting aspects strengthen each other mutually.[25]

My conclusion on this is that such constructions imply a segregated concept of culture. Pluralism means thus, in this particular discourse, that separate cultural units exist parallel to each other. This is also presented as an ideal co-existence, with the emphasis on tolerance. Ideal pluralism, in this discourse, means parallel cultures, in tolerance of each other. The concept of tolerance is the dominating idea of the ideal relationship to "the other". The concept of a firm and lasting collective identity, with a valuable and preservable past providing substantial goods such as culture and tradition, is however the declared starting point for this tolerance. "We" (should) tolerate "the other". Tolerance is thus seen as a wanted characteristic, which should be learnt and promoted in schools.

Such a segregated picture of separate cultures, with separate histories and backgrounds, also implies and supports a picture of separate futures. It is a static picture, preventing cultural development, exchange and change. The "thousand years" behind "us" is set up as a normative frame, which should define the future for us all.

THE RECENT STORY AND A DISCUSSION OF THE CHILD

The KRL-subject of the 1990s was not a sustainable construction. It was changed in 2002 and in 2006 its time was over. The Norwegian school children are today taught the subject RLE (Religion, livssyn, etikk/Religion, Life Philosophies, Ethics).[26] The exemption rules are changed, so that Article 2.3a of the Law of Education secures all pupils the right to be exempted from those parts of the education that, based on their own conviction, is experienced as a practicing another religion or in other ways seen as violating their convictions. The curriculum has a strictly knowledge oriented approach to the subject.

In this presentation of what I call "the recent story", I will focus on two aspects of the recent debate regarding religion/life stance and education. These are the discussion of, and the change of, the objects clause of the Law of Education, and the tendency in the debate to strengthen the child's individual rights.

In 2008 the objects clause ("formålsparagrafen") was debated and changed by a unanimous vote in the Storting. The law proposal to the Storting was based on a report by a commission appointed by the government, the Bostad-commission (NOU 2007: 6), who, through a long process, developed a new objects clause to replace the old. Through the previous debate in the 1990s, the objects clause was treated

by the majority in the Storting as a foundation for the school that really should not be touched and not be changed. The minor changes that were made in 1998, were counted as additions and editions – not as real changes. Thus the initiative, the commission, the proposal and the debate and decisions ten years later together represent a clear contrast to the general discourse in the 1990s. Change was possible.

The real scope of the change has been discussed from the first moment. The Storting did not directly accept the proposal from the commission. The proposal was turned around – and the turn was significant. The commission listed a set of values that should be fundamental to education – such as respect for human decency, intellectual freedom, charity, equality and solidarity – and it was pointed out that these central values are expressed in several different traditions and beliefs. The values themselves were thus emphasized as the uniting elements.

The adopted law article, however, includes to a large degree the same words and elements, but points out two specific traditions – Christian and humanistic heritage and tradition – as the fundament of education. Thereafter the important values are listed. Finally the law article adds that these values are also expressed in other religions and life stances. Thus the adopted article emphasizes two traditions as the primary common foundation for the school.

This turning around of the formulations may seem minor. But it was significant enough that is was put political energy into getting it done. And the impact is significant. By changing the factors' order, the formulations of the new article now link back to the traditional formulations by emphasizing the Christian foundation – here along with the humanistic tradition. The former objects clause formulated it this way: The school should "help to give the pupils a Christian and moral upbringing".[27] So – is the "new" article really new?

There are other changes from the former objects clause that are also substantial and significant. A formulation from the Law of 1998 declaring it as an objective for the school to "support a common knowledge-, culture- and value-fundament" – was not continued in the new article in 2008. Another formulation emphasizing tolerance as an ideal that should be promoted, is also erased in 2008.

Tolerance, as a central discursive concept describing the relationship between "us" and "the others", is discussed above. I claim here that the emphasis on tolerance in the 1990s held other concepts – such as dialogue – down, and prevented equality between groups. As described earlier, the composition of pluralism thus ended up as a composition of separate groups with separate pasts and possible separate futures, but where the original, real citizens – "we" – should act tolerant and kind towards those defined as newcomers and superfluous to the Norwegian society. Such were the major constructions ten years before this change. Can the wiping out of the word "tolerance" in the new article, along with the step away from declaring common knowledge, culture and values as an obvious objective, be read as something really new, a break with this segregated concept of culture?

I would answer: Maybe, yes. The declared common fundament as an objective is replaced with the objective to obtain insight in cultural pluralism. That is a change.

And the at-arm's-length kind "tolerance"-formulation can be said to have been replaced by "respect for the individual's convictions". That is a change.

Together these changes may be interpreted as a discursive change where plurality to a larger degree is seen as something within the collective identity. That "we", the community is pluralistic, different, made up of many variations. That pluralism is not something that regards a uniform "we" encountering the different "other". This indicates a somewhat more inclusive concept of culture; culture as not just one straightforward unit through the centuries, but culture as a place of multitude and possible development and change.

Politically, the new article was interpreted and presented in contradictory ways. Some proclaimed the change, the break – some emphasized the continuity with the old formulations. Still, these different political voices had voted unanimously for the same article. My interpretation of this is that the community of interests, connected to actually deciding on a common article for the common school, overruled the differences in values and preferences. In a situation where there actually is a multitude of values, the community of interest thus can secure the integration and the community.

And at the same time it is necessary to underline the very fact that by making a change that was at the time actually interpreted as a real change, implied that the objects clause turned political. It was no longer an eternal construction just to be preserved.[28,29]

The analysis of the 1990s debate revealed a common trait that can be connected to the earlier history of education and religious upbringing – namely what we can call an idea of family communitarianism. This idea undercommunicates the idea of the child as an individual with its own rights to religious freedom. Children are instead seen as an integrated part of the family, with the parents' rights to choose the family religion, and decide the religious schooling of the child as the normative framework for all decisions. The child is thus treated as a person who already belongs to a religion, and – in some cases – can be seen as a representative of this religion in the classroom, and not as an individual who can find and choose for him-/herself. New tendencies in the public debate include a stronger emphasis on the child's own rights to religious freedom, and also the child's right to be protected against unaccepted consequences of religious practice.

Children have their own right to freedom of belief, as expressed in the UN Convention of the Rights of the Child Art. 14.1: "State Parties shall respect the right of the child to freedom of thought, conscience and religion."

This is followed by the next, Art. 14.2; which underlines the parents' right to guide the child ("provide direction") in the exercise of the child's rights. This is in accordance with the UN Convention on Civil and Political rights Art. 18.4, which also underlines the parental right:

> The State Parties to the present Covenant undertake to have respect for the liberty of parents and, when applicable, legal guardians to ensure the religious and moral education of their children in conformity with their own convictions.

As we have seen in the presentation of the political debate in the 1990s, the child herself was hardly mentioned as the holder of the right to freedom of belief. The focus – from most all sides of the political debate – was on the parents' rights – and on considerations of what was best for culture/society in general. I have called the close association of the child to the family's chosen religion "family communitarianism"; the child's identity is directly derived from, and grown within, the family frame.

This has changed. The Children's Ombudsman in Norway took initiatives in this field in 2010, by pointing out the importance of not only protecting parents' right to choose and guide their children in the area of religion and life stance, but also protect the child's individual rights.[30] Julia Köhler-Olsen's recent Ph.D. thesis on the child's right to self-determination regarding religious norms, points clearly out that the child has the right to its religious or philosophical identity. This means that the child's identity not necessarily coincides with, or is derived from, the parents' religious or philosophical conviction.

Regarding national curricula, Köhler-Olsen states that international conventions require that education is objective, neutral, critical and pluralistic in order to respect the parents' right to decide regarding the children's upbringing. But – at the same time – the Convention on the Rights of the Children obliges the State to respect the children's individual rights, and not automatically assume that they share their parents' religious identity (Köhler-Olsen 2012).

This perspective on children's individual rights is also central in the report on Religion and Life Stance Policy, presented in January 2013 (NOU 2013:1). Consideration of the child is one basic premise for the whole report. This means that the child must have the right to be protected from harmful effects, abuse or repression based on religion or belief. It is argued that the parents' rights to "ensure the religious and moral education of their children in conformity with their own convictions" is not an unlimited right. On the other hand the report argues that the child's right to individual choices and self-determination regarding religion and life-stance must be guaranteed, with sufficient considerations of the child's age and maturity.

It is reasonable to interpret these tendencies in (at least) two ways that adds to the theme of this chapter. First – the stronger emphasis on the child is likely to loosen the grip of the idea of family communitarianism. The child is more seen as an individual with individual rights that can be realized at different ages, according to the child's maturity and ability. This has further implications for the idea of collective identity. Collective identity cannot just be seen as something which is inherited and taught. It is also – or even foremost – something that is chosen.

The second interpretation that this article will bring forward, is the opening of the discussion for possible restrictions on parents', schools' or religious societies' rights to exercise their religious freedom – when these freedoms interfere with other basic rights of the child. The right to freedom of religion and belief is thus underlined as not an unrestricted right that overrules all other rights in society, but as one right among other rights.

CONCLUDING REMARKS

"The other" has always been a part of any society. The idea of a homogenous past is created by leaving out "the others" of the past, and making the majority be counted as the "real" (and even the only real) citizens, still determining who "we" can be in the present. Claiming that plurality and otherness are new phenomena, introduced by some random newcomers coming from the outside, is a construction that strengthens and consolidates this contrast, and thereby both the construction of identity and of otherness.

So what are the current ideas of identity and otherness and what is the composition of plurality in Norway today, understood as discursive constructions based on recent debate in the field of religions, life stance and education? The school subject has changed and the exemption rights are widened. The debate is now primarily taking place elsewhere. It regards swimming education, the objects clause, children's use of religious symbols or clothing, the teaching in private schools or pupils' participation in church services. The debate goes on – and it is still important to the understanding of identity and otherness.

The objects clause is, after the revision in 2008, still pointing at a Christian and humanistic collective identity as the primary fundament. This is a continuity of a concept of "us" based on a declared homogenous past. Pluralism is in political debate basically understood as something brought into the Norwegian society by "the other", the outsider, and in many ways the superfluous and non-necessary appendix to the Norwegian community. Pluralism is thus still commonly not understood as a part of "us". However, for example the changing use of the concept of tolerance may point in some other way, towards more overlapping identities and cultures in a community of multitude.

It is reasonable to say that there is a major uncertainty whether Norway really is a pluralistic society. There is a major insistence on declaring that Norway has been, is (and should be) a homogenous, Christian and humanistic society. The concept of culture in most public and political debate must probably be said to still be a segregated concept with different parallel cultures, side by side, and with one major and privileged culture. But there are also other indications, both in debates and in practical life, that open up for possible concepts of collective identity that include pluralism and multitude as part of the idea of collective identity.

There is no tradition for laïcité in Norway. In contrast, religion and beliefs have had a visible and strong place both in the public life and in governmental politics and public institutions, such as schools. Religion has through the years been used to build a strong Christian and, eventually, also a national unity. At the same time it has been used to exclude and make divisions. Religion can still be used in both ways. An acceptance of pluralism as a common frame in which individuals and groups can realize their rights of freedom of belief, could be a way to let religion/life stance still be a visible part of politics and society – but without the suppression of minorities.

This chapter suggests that the increased focus on the child's independent religious freedom, the non-determination by heritage and birth, could be seen as a possible

support for such a future where the ensuring of each individual's right to freedom of belief is in focus.

NOTES

1 The analysis of the debate in the 1990s is based on the author's Ph.D. research, see Wingård (2011).

2 The Norwegian Law of Education has traditionally always had an objects clause; that is a specific article of the law that describes the major aims of education. The formulations of the objects clause have had a remarkable stability through the years, and have often been defended as a necessary foundation for the Norwegian school.

3 Discourse analysis is a wide field of academic approaches. A central aspect of such analyses is to focus on how meaning is constructed through language, not by reference, but by the construction of what is true and valid. "I would like to show with precise examples that in analysing discourses themselves, one sees the loosening of the embrace, apparently so tight, of words and things, and the emergence of a group of rule to discursive practice. These rules define not the dumb existence of a reality, nor the canonical use of a vocabulary, but the ordering of objects." (Foucault [1971] 1972: 48–49)

4 Such analyses of identity versus otherness have among other theoretical views been based on post colonialism, feminism and post-structuralism.

5 This angle draws lines from Foucault's genealogy, deconstruction and post colonialism. It is also related to perspectives on writing of history, as through the idea of radical historicity (Simonsen 2003)

6 See Wingård (2011) for further discussion of method based on discourse theory and writing of history.

7 Svein Lorentzen has a thorough analysis of nation building through Norwegian school books in the years since 1814 (Lorentzen 2005). Lars Laird Eriksen has in his Ph. D. thesis – named *"Learning to be Norwegian"* – a recent perspective on identity management and religious education (Eriksen 2010)

8 Other worldly needs, such as skills connected to employment, were not part of school education at this time. The children learned their practical skills through their participation in duties and work outside school. A hundred years later – in the 1800s – the discussion about inclusion of other school subjects, such as science, history and languages, started. Religion was no longer the *only* important teaching subject.

9 The reformation in 1537 meant nationalization of the church. The (Danish) King was head of the state and became head of the church. Immigration ban was established in 1569 for people of other faiths than the Lutheran. After 1660 the King's power increased even more. The whole administration of the state was closely connected to the church and the King had the duty to ensure the right faith amongst all inhabitants of the country. Strict religious duties were prescribed in different laws, such as the duty to baptize children, the duty to go to communion, the duty to attend church services, and in 1736 the duty of confirmation. Until 1845 it was also a duty to be a member of the Norwegian Church.

10 Norway and Sweden were in the period 1814–1905 separate states, but shared the same King. The (Swedish) King controlled the foreign policy for both states from Stockholm. This was one major reason for Norwegian discontent with the union, and the final dissolution of the union in 1905.

11 Thorkildsen (1998: 140) declares national religiosity, the understanding of unity of the national and the religious (i.e. that God has given "us" this country, God leads the people and helps in times of national crises) as a phenomenon which in Norway had its early start by Henrik Wergeland in the 1820s and 1830s, but did not get established within the Norwegian church until the conflicts with Sweden around 1900 and the dissolution of the union in 1905. In the 20th century this has also been a phenomenon that has varied in strength.

12 The analysis is based on all documents from the government and the Storting regarding this issue in the 1990s up to 2001. Further analysis of this debate can be found in Wingård (2011).

13 The interpretation as such is, however, built on an extensive amount of texts, which cannot be referred in any comprehensive way in a short chapter.

14 This was formed by the sitting government in 1994, led by Arbeiderpartiet.

15 (Author's translation: "Established truths and old institutions are disturbed. For children and young people these changes and the rapid alterations can give an impression of moral relativism. When right and wrong or rules of etiquette are not given and shared, many children and young people are left to their own ethical fumbling. Children and young people are exposed to many and crossing influences,

with an overflow of information and with a pressure from the whole world against the local and national culture. "The young are thus exposed to plural and contradicting value influences. This is enforced by the tendencies to secularization and pluralism, where belief, religion and church do not make up a uniform or unambiguous picture.")

[16] (Author's translation: The majority means that the school's challenges have increased through the extensive changes in the contemporary society. Norway is changing from a very homogenous society into a more multicultural society, through an increasing number of people from other countries, with a different ethnical background and with other beliefs. There are major indications that the contact between generations is weakened and the anchoring in history and tradition is weaker. The young are been exposed to extensive and crossing value-oriented pressure through modern mass media, television and video. The impact of these different trends are accumulated and condensed in school, which thereby is given a growing task when it comes to the development of understanding, tolerance and social cohesion across different groups")

[17] The core majority were the three political parties Arbeiderpartiet, Senterpartiet and Kristelig Folkeparti. The party Høyre joined the majority in some votes.

[18] This a written remark from Arbeiderpartiet (except two representatives), Senterpartiet, Høyre and Kristelig Folkeparti. (Authors translation: "The broad majority emphasized the Christian and humanistic values. Further is it among other things, emphasized that Norwegian belief, as this is manifested in history and in the contemporary, is a prerequisite for all pupils in school, in the same way as knowledge of Norwegian language, history and culture.")

[19] This is part of a statement from one representative from Senterpartiet, during a debate in the Storting. (Author's translation: "Our entire culture is built on the people's religious roots and cannot be neutral in relation to the belief or conviction of the people. […] Christianity has marked our society for one thousand years. It has given us a cultural heritage and a religious heritage, it has planted a new set of radical values into our history, such as the care for our neighbours and the care for the weak. These values have up until today been the fundament for the development of our country.")

[20] (Author's translation: "The majority means that it is a collective cultural identity one is contributing to, through a common knowledge-, values- and culture-fundament. This has nothing to do with supression of minorities or forced belief. The point is first and foremost that everybody – as far as possible – should be ensured the same point of departure and the same possibilities for active participation in society. Such a common cultural identity is therefore serving the minorities' social and democratic interests.")

[21] It can be noted that such a description suppresses all kinds of internal differences, injustices and changes (such as the Reformation) in the Norwegian society; when a collective shared identity – since the Age of Vikings until today – is proclaimed.

[22] Author's translation: "The development of the identity of the individual happens by getting familiar with inherited ways to liv, norms and expressions."

[23] Lars Laird Eriksen (2010) states clearly that religion is mobilized to construct national identity in Norway. "Religion is presented as the provider of core values. Thus, religion is seen to provide depth of self, and solidity of the group. Religion is clearly used in governmental identity management projects as a resource for social cohesion." (Eriksen 2010: 336) It is, however, interesting how his class room research shows us that the identity boundaries made through curriculum and other governmental texts, are not reflected in the class rooms. The classes are – in his words – communities of disagreement, at the same time as they share experiences and knowledge. Eriksen emphasizes these classroom practices as providing reason for optimism for the future handling of pluralism and democracy, more than the formal school documents do.

[24] Eystein Gullbekk shows in his research how young pupils actually were made responsible for representing world religions in their class rooms. Their identities were taken for granted, based on each child's belonging to a family (Gullbekk 2000).

[25] This mutual interdependency makes the very idea of "the other" being superfluous to Norwegian identity, a paradox. The contrast itself makes identity possible.

[26] The new conservative/right wing government in Norway from October 2013, has announced that the role of Christianity in this subject is to be emphasized, and the name will be changed (again) into KRLE (Christianity, Religion, Life Philosophies, Ethics).

[27] Author's translation.

[28] The same year, in 2008, all the political parties represented in the Storting made an agreement on the future relationship between the state and the Norwegian church. It led up to central changes in the Constitution in 2012.

[29] In NOU 2013:1 a majority of the commission recommends a renewed evaluation of the objects clause, with emphasis on values, instead of on certain traditions.

[30] See Barneombudet 2010, and also Barneombudet 2011

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12. DEMOCRATIC CITIZENSHIP IN THE NORWEGIAN CURRICULUM

A Comparison Between International and National Policy Recommendations for Strengthening Democracy Through Education

Norway has a strong commitment to democracy which is reflected throughout Norwegian institutions, including the educational system. The Educational Act in Norwegian Educational Law explicitly states that a main goal of the educational system is to foster democracy among the nation's citizens (Norge and Stette 1999). But have educational policies maintained this commitment in recent years? In 2006, the new *Knowledge Promotion* curriculum was introduced in Norway by the conservative government (Utdannings- og forskningsdepartementet 2005). This chapter presents research findings from a project designed to investigate how the reform has implemented the democratic mandate within the context of schooling. In particular, the project encompassed an analysis of the policy papers[1] underpinning the reform. These Norwegian policy papers were compared with international recommendations from The European Council[2], with its Education for Democratic Citizenship (EDC) project (Audigier 2000; Bîrzea 2000; Dürr, Spajic-Vrkas, Martins 2000; Kerr and Losito 2004), and the Organization for Economic Co-operation and Development (OECD), with its Definition and Selection of Key Competencies (DeSeCo) project (Salganik and Rychen, 2003a, 2003b).[3] Both forms of international recommendations support curriculum development that meets the democratic challenges that Europe and the rest of the world are facing.

BACKGROUND

The starting point for the research project was the recent changes in Norwegian educational policy. These changes have been so radical that the outcome could be defined as a new 'episteme', in the sense that the overriding theory of knowledge has been dramatically changed. Democracy and citizenship have traditionally been important concepts, emphasized in *Buildung*,[4] together with knowledge, as the ultimate goal for Norwegian education (Stray 2010). Education in Norway has always been, and is still regarded as, the cornerstone of the welfare state. When it comes to pedagogical ideology, progressive theories (especially those inspired by the works of Dewey and Piaget) and methods are considered to be the best means

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for teaching and learning (KUF 1996). However, in this chapter I will argue that the 2006 Norwegian curriculum represents a new direction in the Norwegian educational landscape which could potentially undermine the long-held commitment to unity, (social) democracy, and the promotion of a clear, social democratic vision.

In 2001, Norwegians experienced 'PISA shock' (Sellar and Lingard 2013). In the Programme for International Student Assessment (PISA) test, Norwegian student achievement was below average, generating heated discussions in the media and within the political community and educational establishment (Kjærnsli, 2004). Critics of the Norwegian educational system,[5] who were quite vocal in this discussion, pointed to several aspects of the school system that contributed to the low PISA test results. They accused schools of producing underachievers and claimed the poor PISA results confirmed this. They claimed that the continuity of study in upper secondary schools was not good enough, and that the educational programmes were not sufficiently customized and tailored to meet individual needs (Bergesen 2006). Furthermore, research indicated that there were big differences in student achievement based on the students' social-economic backgrounds (Kjærnsli, 2004). These research findings led to a political conclusion that there is a poor culture for learning in Norwegian education and that progressive education has had a major role in producing these negative trends (Bergesen, 2006).

Prior to 2006, the theories of progressive education were held to be a crucial link to social democratic ideology. The educational establishment in Norway, especially the works from the educational professor Lars Løvlie (Løvlie 1984, 2004, 2006; 2007) and professor Erling Lars Dale (Dale 1992, 2003, 2005; Dale and Krogh-Jespersen 2004), represent a strong belief that *bildung* is acquired through progressive educational methods. These views have dominated both the curriculum and teacher education for many years. One of the main changes that has taken place is a shift from a philosophical approach to education to a more evidence-based understanding of knowledge and skills. The main policy paper, Culture for Learning, emphasizes these changes as follows[6]:

> In debates about the role education has in society, it is sometimes claimed that there is a conflict between democracy, bildung and equality on one side, and concrete knowledge and skills on the other side. The students have, however, after the judgement of the ministry, the need for basic skills in order for the school to pass on and impart cultural heritage and give the students a proper general education. (Utdannings- og forskningsdepartementet 2004: 31)

However, in the new educational approach, it was suggested that progressive education is based on child-centred principles that inhibit the individual student's ability to understand why learning and knowledge are important (Utdannings- og forskningsdepartementet, 2004; Bergesen, 2006). It was also suggested that it is now more important to focus on student diversity and not on unity, in order to establish a new and better culture for learning. These changes potentially have a considerable impact on citizenship and how it is understood and enacted by teachers and students

in schools. The critics claimed that in the former curriculum, progressive methods served as a tool for a specific ideology, in this case, the social democratic ideology.

RESEARCH QUESTIONS AND METHODOLOGICAL APPROACH

This research project aimed to explore how democracy and democratic citizenship are conceptualized in the new curriculum. What understanding of democracy and citizenship is, in fact, put forward in the new reform? How is education to be used as a tool for strengthening democracy and citizenship? These questions formed the foundation for an exploration of the nature of the specific understanding of democracy and citizenship in the new school reform, and what (democratic or political) aims, objectives and values underpinned the reform. Consequently, the fundamental question at the heart of the investigation was how the purpose of education is represented in the reform.

The methods used in the project were based on policy analysis, both of Norwegian policy papers (NOU, 2002, 2003; Utdannings- og forskningsdepartementet, 2004) and of policy papers from the EDC (Bîrzea 2000; CAHCIT 2006; Dürr et al. 2000; O'Shea 2003) and the DeSeCo project (Salganik & Rychen, 2003a, 2003b). The international policy papers served as the comparative framework for the research questions. The findings from the analysis of policy papers and interviews are presented in terms of discourses (Fairclough 1992, 1995, 2003).

A DISCURSIVE APPROACH

Democracy and citizenship are contested concepts; they mean different things to different people (Stone 2002). Both have to be understood in relation to other concepts, and they are part of a system of concepts used for making sense of the world and its politics. The concepts of democracy and citizenship belong to a discourse (or discourses) that develop inside specific structures of institutionalized meaning. These structures stream thoughts and actions in certain directions (Connolly 1993, p. 1). The concept of political discourse refers to the vocabulary used in political thought and action. It also refers to how meaning is part of the vocabulary, and how it sets the limits for political reflections on the definition of a certain concept. In addition, political discourse refers to how limits of discourse influence what can be derived from it (Connolly, 1993, p. 2).

Political actors' value systems and ideological convictions influence the limits (or borders) of discourse (Stone, 2002). Political suggestions are presented and agreed upon based on convictions grounded in values and ideology. This affects how political challenges are defined, and how strategies are determined to be necessary and important. Social problems and challenges are, in this way, the result of constructions and presumptions about reality. The manner in which the agents debate these concepts are subjective, and objective factors, such as the social, cultural and political contexts, influence how the agents interpret and make meaning of the world (Stray 2010).

Democracy and citizenship in education are fluid concepts that have changed over time. Because of this, it is difficult to make an analysis of the concepts free from political values, because teaching and education never take place in an arena that is devoid of values (Ranson 1994). Educational policy documents and the curriculum may be read as normative and political texts. In a discourse, analytic understanding, construction of meaning, and overall understanding are articulated through such texts. The language used in the texts is constituted by and constitutes the social world. In this way, discourses contribute to signifying the world and constructing the world in meaning (Fairclough, 1992, p. 64). Examples of different discourses in play are historical, economic, educational, cultural, and political in nature, and they cannot be isolated from one another. The dominant discourse constituting power is hegemonic (Fairclough, 1992, p. 64. These assumptions, transferred to the research project presented here, are used to identify different discourses and to reveal or expose which discourses are hegemonic.

THE INTERNATIONAL DISCOURSE

Two international policy frameworks were analysed and compared to the policy papers underpinning the Norwegian school reform: namely the OECD's DeSeCo project and the European Council's EDC project. I will argue that these two frameworks are often in tension with each other and compete to produce a certain kind of citizen. On one hand, there is a 'maximal' (Kerr 1999) citizenship, with individuals willing to embrace the requirements of critical and transformative citizenship in a society; on the other hand, 'minimal' (Kerr, 1999) forms of citizenship involve individuals who are personally responsible but rarely look out for civil society or the common good. The OECD DeSeCo project was intended to develop theoretical and conceptual fundamentals for defining and choosing the most important competencies that could be developed through education, the so-called 'key competencies' (Salganik & Rychen, 2003a, 2003b). According to DeSeCo, the acquisition and development of key competencies contribute to a successful life for individuals and a well-functioning society. The DeSeCo project developed an interdisciplinary approach to the understanding and definition of these key competencies in order to provide an understanding of competence that is holistic and accounts for different dimensions of an individual's life. It implemented different political, social, normative, and economic approaches, but it was anchored in the common concept of democracy as a mode of living and of human rights as a normative reference (Salganik and Rychen 2003a, 2003b). The DeSeCo project was based on the assumption that a population's educational level has a positive effect on the democratic processes in society and the respect for human rights. In this way, individual development of competencies is tied to society's collective goals (Salganik and Rychen 2003a, 2003b). The DeSeCo project proposed the following three categories that together provide the individual with the key competencies for living a successful life and being able to contribute to a well-functioning society:

interacting in socially heterogeneous groups, acting autonomously, and using tools interactively (Salganik & Rychen, 2003a, 2003b).

Similarly, the EDC project aimed to strengthen the development of democratic citizenship by recommending explicit guidelines for school activities. First, the EDC project identified the values and skills that are needed by an individual to be a participating citizen. In addition, the project group explored how the individual could acquire democratic values and skills. These values and skills are those that an individual can transfer to others through his or her actions and attitude. The EDC project defined the concept of citizenship broadly; it is a person coexisting in society with others. It emphasised that citizenship is more than a status that has been granted to the subject; it is the way in which a person interacts with his or her society (Audigier, 2000; Bîrzea, 2000; Dürr et al., 2000; O'Shea, 2003).

EDC documents proposed that the UN conventions on human rights are preconditions for school learning and teaching activities (Audigier, 2000; Bîrzea, 2000; Dürr et al., 2000; O'Shea, 2003). The project group incorporated human rights conventions not just as legal requirements, but as general conditions for school activities and for understanding of citizenship. Moreover, definitions of citizenship move beyond liberal philosophy and minimal individual rights. Through the incorporation of participation and co-determination and the emphasis on the individual obligations towards the collective, the project included the communitarian demand that solidarity is an essential aspect of citizenship (Taylor, Gutmann Appiah 1994). Therefore, it is possible to understand the EDC concept as a blend of liberal and communitarian theories. The liberal principle of the rights of the individual is the basis of its concept of citizenship, while it is more communitarian in its theoretical focus on citizenship, being based on concepts like active participation, solidarity, pluralism, and commitment (Stray, 2010).

One of the other fundamental pillars of the EDC project is the concept of lifelong learning. In this way, the project approaches a wider audience and is not limited to schools. The principles developed from the project are supposed to be transferable to all arenas that involve learning and participation. Theories about lifelong learning are essential to the project. EDC is taught in schools through the implementation of a model grounded in cognitive, affective, and experimental teaching methods. The concept of competence is used in all dimensions and is in this way tied to the subjects' cognitive, affective, and experimental learning and experience. Teaching and learning citizenship education strengthens schools by promoting educational goals that ensure high-quality contribution to strengthened social coherence, both as part of a process of change and as a basic pillar in the learning society (Salganik & Rychen, 2003a, 2003b).

The DeSeCo and EDC projects convey a divergent view of citizenship. On one hand, they appear to embrace holistic and broad notions of citizenship that are inclusive, participatory, rights-oriented, and communal, yet intermixed with this is a set of ideas which could be described as being neoliberal and having an instrumentalist view of citizenship. For example, both the DeSeCo and the EDC projects are based on the concepts of lifelong learning and the development of a learning society. The development of competencies is related to the neoliberal concepts of people as

human and social capital and of each individual's ability to navigate and contribute as a citizen in the democratic process. In this way, democratic citizenship may be understood as a social field (Perrenoud 2001). Competence is understood as the possibility of meeting challenging tasks by mobilising psycho-social conditions. This is a functional and task-oriented understanding of competence, implementing both cognitive and non-cognitive aspects (Salganik and Rychen 2003a, 2003b).

It may be helpful to visualise these multiple positions as a series of fields or positions. Analytically the international discourse has four levels: the discourse field, discourse positions, points of fixation, and fields of knowledge (Stray 2010). In the study presented here, the international discourse is citizenship education that promotes successful functioning in society. This serves as the discourse field, which is represented through a selection of discourse positions: knowledge, competence, social equalisation, citizenship, and economy. Furthermore, the points of fixation are social capital, human capital, and key competencies, and they are the main categories or themes that the discourse positions have in common. These fixation points develop the foundation for the hegemonic field of discourse. The discourse field, as an object of knowledge, is defined through the different positions of discourse and the modifications made through the points of fixation. The fourth level represents the domains of knowledge included in the points of fixation. These domains are lifelong learning, work life and community life, the learning society and knowledge society, monitoring and evaluation, and citizenship as illustrated in Figure 1.

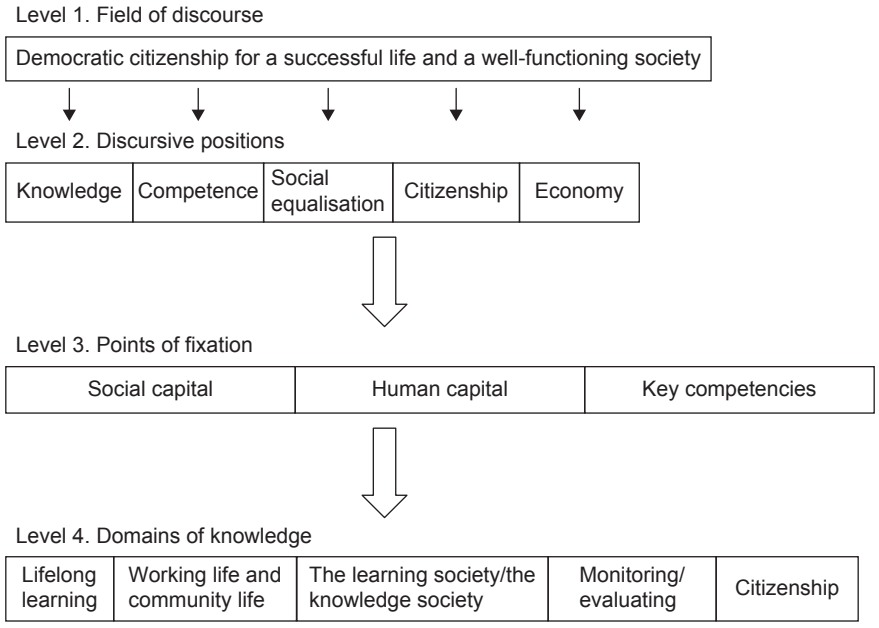

Figure 1. The International discourse.

The field of discourse in the international policy papers is democratic citizenship. The object of knowledge – democratic citizenship – is legitimised by the idea of a successful life and a well-functioning society.

Like the discourse positions, the international recommendations are grounded normatively and politically. The international recommendations are intended to help strengthen democratic citizenship through education. The field of discourse is, in this way, legitimised through the discourse positions by the object of knowledge being interdisciplinary and theoretically and conceptually clarified by the different points of fixation.

The findings from the analysis illustrated in Figure 1 suggest that the international recommendations (EDC and DeSeCo) are legitimised by democracy and citizenship. By analysing the data, it was possible to conclude that discourse on knowledge and education is about the framework conditions for developing a democratic citizenship. The discourse is legitimised by the common desire for an educational system that promotes individuals' abilities to live successfully in a functioning society.

Figure 1 can be related both to the DeSeCo and the EDC projects.

THE NORWEGIAN DISCOURSE

An analysis of the Norwegian policy papers underpinning the reform (NOU 2002, 2003; Utdannings- og forskningsdepartementet 2004) showed that the Norwegian discourse differs from the international discourse. The goal for Norwegian education, first and foremost, is connected to the students' future ability to work and hold a job. Competence is an important concept in the international policy papers, but in the Norwegian policy papers, competence is not related to citizenship but rather to the quality of an individual's knowledge, skills, and attitudes.

In the Norwegian policy papers, a number of neoliberal concepts were introduced that were not previously used in the Norwegian educational policy context. Examples of such concepts are the society of competence, competence economy, and the cultivation of human capital (Utdannings- og forskningsdepartementet 2004). Including the concept of competence is considered important because a population's competence is regarded as the single most influential factor in determining a country's financial capacity (Utdannings- og forskningsdepartementet 2004). Furthermore, the concept of competence is significant in regard to educational issues due to an emphasis on the educational institution's performance quality. By strengthening educational institutions' performance quality, students will be better able to acquire necessary knowledge and skills.

Politicians are oriented towards solutions to Norway's educational challenges. In the policy papers there is increased criticism of the existing educational system. The authors of the policy papers underscored that

> [they] are aiming towards the ideal that every student is provided adapted education and differentiated teaching… . When everyone is treated in the same way, the result is larger differences. To consider differences is a demanding

> task, but at the same time the greatest challenge for Norwegian schools. It takes a change in attitudes, but also gives knowledge, competence, and possibilities for the teachers in their daily work (Utdannings- og forskningsdepartementet 2004: 4).

The positions in the policy documents are unified and, therefore, legitimise each other. There is an increased emphasis on the individual student and less emphasis on the collective. References are often made to the ideology of the knowledge society and lifelong learning, and to the need for a population with basic skills and knowledge. The policy papers that were analysed often weakly represent the discourse of competence, meaning that the concept of competence was not made clear, nor was it theoretically or conceptually clarified or elaborated upon. In addition, the papers do not present any obvious interdisciplinary approaches.

In the policy paper "Culture for Learning" (Utdannings- og forskningsdepartementet, 2004), a new culture for learning calls for a political shift in education towards a new culture in schools and educational institutions. The schools would be given a lot more freedom, responsibility, and trust, and through a framework of demands for quality, the educational institution would be held responsible for student outcomes. In the previous curriculum (L97; KUF, 1996), the approach to knowledge was broad. The policy paper (Utdannings- og forskningsdepartementet, 2004) suggests that it is too broad and that its ambitions should be more focused and defined by the following five basic skills: the ability to communicate orally, the ability to read, numeracy, the ability to communicate in writing, and the ability to use digital tools. In the subject curricula, the five basic skills are integrated into each subject area (language, math, social studies etc.). Structural changes are introduced through a new curriculum, and schools may at that time decide and define the procedural aspects of education. The school is thus responsible and accountable for the quality of its performance. This is monitored in part through the introduction of national tests, which were never used before in Norway.

Bildung is, in these documents, strongly related to the acquisition of basic skills, and is now understood as a more individualised project. The democratic aspects are tied to this individualisation, and the students are expected to develop an ability to critically consider their own learning and potential. One example is the following statement from Culture for Learning (Utdannings- og forskningsdepartementet 2004: 31):

> Democracy means that the citizens in a society decide upon which political ideals the society is to be ruled by. In order to be able to understand and participate in the democratic debate and the democratic development, everyone needs basic skills … such basic skills are also necessary in order to be able to participate actively in the democratic society; for example, through discussion on how the petroleum fund or the pensions of the future should be used.

In the policy papers, skills receive greater emphasis than the competencies. The competence approach is stated most clearly in the relationship between literacy and

skills. The discussion and reflections on defining competence or understanding the concept are missing based on comparison with the international documents. The primary articulated goal for the educational system is higher quality and increased performance. Through accountability, a new and better culture for learning is expected to develop.

The international policy papers legitimise education and the activity of educational institutions by arguing that the school is an arena for democratic practice and preparation for citizenship. The Norwegian policy papers use neoliberal financial arguments for reforming the educational system. The concept of social capital is not emphasised in these papers. Instead, the concept of human capital is given a priority role and is presented as the main goal for education.

The analysis of the Norwegian policy documents illustrated how the Norwegian discourse differs from the international discourse. One of the main reasons for redefining the curriculum to such a large extent rested on evidence from international tests like PISA (Stray 2010). Through increased quality of performance, the educational system should be a force in Norway's ability to compete on an international level and to increase human capital. This is illustrated in Figure 2, which shows that the discursive field is about cultural changes in education. The legitimisation is measured by improvement in the quality of performance in the educational system. Level 2 defines the discursive positions. The Norwegian discourse is characterised

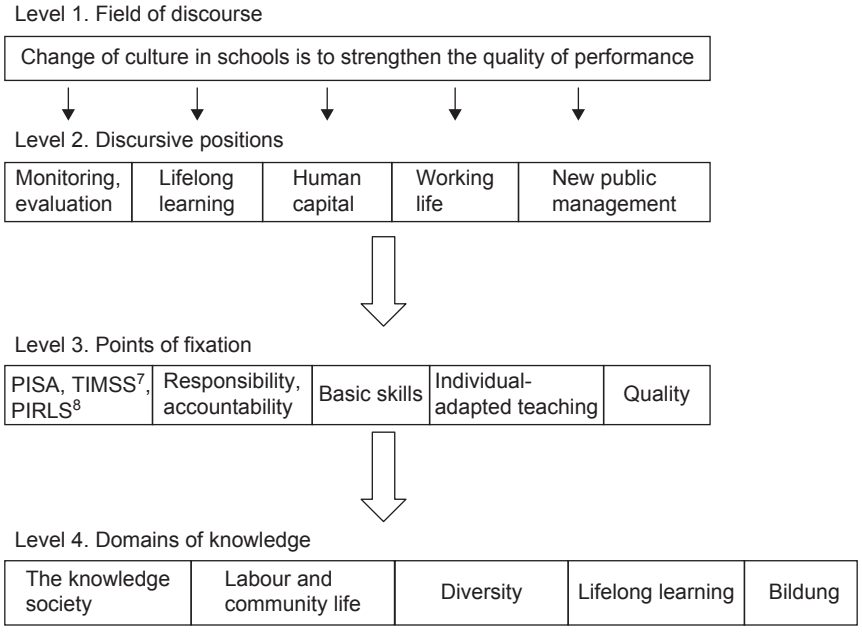

Figure 2. The Norwegian Discourse.

by the discursive positions being very closely related and intertwined. This is in contrast to the international discourse represented by the OECD and EDC policy, which comprises diverse and somewhat contrary discourse positions. The discourse positions emphasised in the Norwegian material are monitoring and evaluation, which reflect the position regarding the purpose of education. In addition, lifelong learning is emphasised as an important discourse position. The two next positions, labour and human capital, can only be represented as discursive positions because they are part of the educational discourse. In a discourse about school quality, these two might represent only one discursive position. The final discursive position is New Public Management, which in turn can be related to the concept of accountability.

Individual-adapted teaching is a point of fixation that is common for all the documents analysed. Quality is another fixation point common for all the documents.

The fourth level, domains of knowledge, contains those categories included in the discourse. These are the knowledge society, labour and community life, diversity, lifelong learning, and *bildung*. As mentioned, *bildung* is now intertwined with basic skills.

The Norwegian discourse differs from the international discourse by not including what Mouffe (Mouffe 2002) calls *antagonisms* (i.e., conflicts and opposites). There are no opposites or competing approaches in the Norwegian discourse positions; instead, positions overlap. Antagonisms have a democratic function. Political discourse, which is understood as the struggle for power, is at its best when it presents different discourse positions to the public. When this is done, the decision-making foundation improves. When the discourse positions overlap, one consequence is that the fixation points (being what the discussion is about) are closed. This, in turn, leads to the disappearance of conflict, antagonism, and power struggles, and the political field is reduced to a rational process of negotiation between private interests (Mouffe 2002, p.181). In consequence, democratic discourse and democratic processes decline. I would argue that through this process, the broad, critical understandings of democratic citizenship in Norway have been reduced to a narrower and more instrumentalist end.

CONCLUDING REMARKS

Norwegian policy documents are based on a discourse about education, democracy, and citizenship that differs from the international discourse. Democratisation was an important subject in previous Norwegian policy documents, but not in the policy papers underpinning the *Knowledge Promotion* curriculum. Several explanations exist for democracy and citizenship not having a place in these documents.

First, the analyses show that the reform was legitimised and promoted on the grounds of evidence-based research. PISA test results strongly influenced the push for reform. The PISA results appear to have been used to explain what is wrong with the Norwegian educational system to a much greater extent than the information actually provided in the results. Secondly, the critical approach towards progressive hegemony gave the reform a specific direction. The reform can be

read and understood as a political confrontation with the pedagogies in the policy papers, divided into reform pedagogies versus progressive pedagogies. The way in which these theories are described is very often negative and condescending. This interpretation of these theories is not limited to the Norwegian discussion. In the book *The Death of Progressive Education: How Teachers Lost Control of the Classroom*, (Lowe 2007) proposed that there is a similar situation in Britain and the other OECD countries. Lowe claims that teachers' social and financial conditions have influenced the development of education, and these changes are the result of 'this new answerability, which sees the profession, as never before, obliged to justify practices and to conform to directives and regulations which impose, ever more directly, the details of the classroom regime' (p. 160).

Teachers have to justify the methods and the educational praxis they choose to use. This is done by testing the students, and their level of knowledge determines the educational practice by using the results as the measurement.

Lowe (2007) claims that society as a whole is more likely to listen and respond to right-wing rhetoric concerning the purpose of education. The orientation towards the quality of performance and accountability is stronger, and this has led to a situation in which 'the voices of those who put the needs of the child at the heart of the educational process have struggled to make themselves heard' (p. 159). The discourse about quality of performance is, according to Lowe, compatible with the discourse that puts the child at the centre.

Norway had a change of government in 2005, and the non-socialist government was replaced by the social democrats, dominated by the Labour Party. The new government criticized the educational reform, and it was expected that it would want to make some fundamental changes before the reform was implemented. This did not happen, and in many ways the social democrats have strengthened the neoliberal reform that was proposed by the right-wing parties. This is apparent from reading later white papers by the new government, particularly the main paper, 'Quality in School' (Kunnskapsdepartementet 2008). In the newest policy papers, the discourse about quality in school (understood as quality of performance) is even strengthened. In this policy paper, performance quality is interpreted in terms of the educational act. The left-wing government lists three main goals for education:

- All students finishing school will have mastered basic skills, enabling them to participate in further education and work.
- All students who are capable will complete high school with a proof/diploma of competence that will be recognized for continuing studies or work.
- All students shall be included and experience mastering (Kunnskapsdepartementet 2008: 11)

It may seem that performance quality is emphasised by politicians because students apparently learn enough about democracy in school as it is. The former Minister of Education (Kristin Clemet) said that democratic citizenship was not considered important or urgent when she started to develop the new curriculum (author).

Based on the findings from the IEA (International Association for the Evaluation of Educational) achievement tests[9] (Mikkelsen 2001; Mikkelsen and Fjeldstad 2003), which showed high achievement by Norwegian students, politicians and a portion of the educational establishment seem to believe that democracy and citizenship are issues that do not require attention.

In reference to the research questions, I will offer some tentative answers. I first asked whether it is possible to identify a particular understanding of democracy and citizenship in the *Knowledge Promotion* curriculum. The reform seems to have strengthened the tendency towards individualisation. Diversity is strongly emphasised in the reform, and there are grounds to suggest that there has been a shift in the curriculum towards a more liberal understanding of minimal rights. This includes a tendency to ask for more from all students and to make them accountable for their achievement. In the long run, this includes being more responsible for their own rights and pursuing their own happiness and their own future prospects. There is no clear-cut or prominent aim for democratic citizenship in the reform. Instead, democratic goals are at the least under-communicated or at the worst totally ignored.

My second question involved which aims, objectives, and values underpinned the reform. The conclusion is quite clear. The policy documents stress a new culture for learning, and this was the main aim of the reform. The objective is to make Norway competitive internationally, based on the arguments that knowledge is the new currency. This is in line with the neoliberal regime, represented through among others the OECD (OECD 1999). When it comes to values, it is hard to tell. Democratic citizenship was definitely not considered a high priority within the Norwegian discourse compared with the international discourse about education, democracy, and citizenship.

This led to the third question: how is the purpose of education represented? The purpose of education is represented through a mantra that all students must acquire five basic skills. If they do that, they have the foundation for (in the words of the DeSeCo project) participating in a democratic society, succeeding in life, and contributing to a well-functioning society. This is a minimal understanding of citizenship, in line with the international globalization strategy for a knowledge-based society. The culture-specific (Norwegian) interpretation of this doctrine is downsizing the importance of democracy and citizenship.

NOTES

1 The curriculum is not a part of the analysis presented in this chapter.

2 The European Wergeland Centre (EWC) is a European resource centre on education for intercultural understanding, human rights and democratic citizenship. The centre is based in Oslo, Norway.

3 It is of course relevant to analyse these policy papers critically, especially concerning the ideology of the knowledge economy they are representing. In this research project, they served as comparative policy papers, because in addition to telling something about the similarities and differences in national and international approaches, they also give some information about how Norway sees itself in an international context.

[4] Bildung is a central concept in the German tradition of educational philosophy and research and can be translated to education, formation, or both. Bildung refers to self-cultivation. It can be understood in the term of human self-education as both personal and cultural maturation. Harmonization of mind, heart, selfhood and identity is achieved through personal transformation, which presents a challenge to the individual's accepted beliefs. Through education, the individual develops a critical stance toward oneself and the society and becomes a critical thinker.

[5] The critics ranged from politicians, the media and several organizations. Bergesen (2006) gives a broad overview of the critics.

[6] All translations done by the author

[7] Trends in International Mathematics and Science Study

[8] Progress in International Reading Literacy Study

[9] International Association for the Evaluation of Educational Achievement. Civic knowledge and engagement: An IEA study of upper secondary students in sixteen countries.

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