

Teacher Education Research between National Identity and Global Trends

Anna-Lena Østern, Kari Smith, Torill Ryghaug,
Thorolf Krüger and May Britt Postholm (Eds.)

NAFOL Yearbook 2012

*Teacher Education Research between National
Identity and Global Trends*



FAGBOKFORLAGET

First published 2013 by Vigmostad & Bjørke AS
© 2022 copyright of the selection and editorial matter, Anna-Lena Østern, Kari Smith,
Torill Ryghaug, Thorolf Krüger and May Britt Postholm

© 2022 copyright of the individual chapters is held by the respective authors.

The Open Access version of this book, available at oa.fagbokforlaget.no, has been made available under a Creative Commons Attribution 4.0 International (CC BY 4.0) license.

This license grants permission to copy and redistribute the material in any medium or format, and to remix, transform, and build upon the material for any purpose, even commercially. The exercise of these freedoms is granted on the following terms: You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

The license text in full is available at <https://creativecommons.org/licenses/by/4.0/legalcode>

Note that other rights, such as publicity, privacy or moral rights may limit the use of the material.



This book has been published with funding from the Norwegian Research Council via NAFOL.

This book has been peer-reviewed in accordance with Universities Norway's (UHR) guidelines for scientific publications.

ISBN print edition: 978-82-321-0193-1
ISBN digital edition: 978-82-450-4084-5

Enquiries about this book can be directed to:

fagbokforlaget@fagbokforlaget.no

www.fagbokforlaget.no

Fagbokforlaget

Kanalveien 51

5068 Bergen

Tlf.: 55 38 88 00

Layout: Type-It AS

Cover Layout: Mari Røstvold

Cover by Hannah Kaihovirta-Rosvik

Contents

| | |
|-------------------------------------|---|
| Foreword and Acknowledgements | 9 |
|-------------------------------------|---|

Part 1

| | |
|---|----|
| Response of the National Graduate School for Teacher Education NAFOL, to the Call for a More Research Based Teacher Education in Norway | 13 |
| <i>Anna-Lena Østern & Kari Smith</i> | |

| | |
|---|----|
| Becoming Educationally Wise: Towards a Virtue-Based Conception of Teaching and Teacher Education | 29 |
| <i>Gert Biesta</i> | |

| | |
|--------------------------------------|----|
| Education after 22nd July 2012 | 53 |
| <i>Inga Bostad & Lars Løvlie</i> | |

| | |
|---|----|
| Accountability under Ambiguity, Dilemmas and Contradictions in Education | 77 |
| <i>Petter Aasen</i> | |

Part 2

| | |
|---|----|
| Educating Teachers: A Comparative Perspective across the Professions | 95 |
| <i>Lee S. Shulman (key note resumé)</i> | |

| | |
|---|-----|
| Challenges for Teacher Education in Developing Countries: the Case of Tanzania | 101 |
| <i>Stella Damaris Ngorosho & Ulla Lahtinen (key note)</i> | |

| | |
|--|-----|
| Trends and Challenges in Teacher Education: National and International Perspectives | 121 |
| <i>Marilyn Cochran-Smith (key note)</i> | |

Part 3

| | |
|---|-----|
| Motivational, Personal and Cognitive Prerequisites of Pre-service Teacher Candidates – A Systematic Analysis of Application Documents | 139 |
| <i>Franziska Frost, Tina Seidel & Manfred Prenzel</i> | |
| Knowledge Creation in Teachers' Professional Development: Tensions between Standardization and Exploration | 163 |
| <i>Kristin Helstad & Andreas Lund</i> | |
| Qualification Frameworks and the Concept of Knowledge. From Aristotle to Bologna, Brussels and Norway | 185 |
| <i>Kristin Barstad</i> | |
| Principal's Leadership through Perspectives on Person, Profession and Position | 215 |
| <i>Siv Saarukka</i> | |
| (Dis-)playground for (De-)signmakers @;-) | 237 |
| <i>Solveig Åsgard Bendiksen</i> | |
| Entrepreneurship in Translation: From a Techno-Economic to an Educational Context | 257 |
| <i>Dag Ofstad</i> | |
| School Song Repertoire as a Means of Building National Identity | 277 |
| <i>Camilla Cederholm</i> | |

Part 4

| | |
|--|-----|
| The Conference Poster as a Multimodal Hybrid Form of Knowledge Exchange | 303 |
| <i>Anna-Lena Østern & Alex Strømme</i> | |
| From Accountability to Cultural Pedagogy and a Professional Space for Teacher Education – a Symposium Presentation | 315 |
| <i>Anna-Lena Østern, Johanna Ray, Hannah Kaihovirta-Rosvik & Thorolf Krüger</i> | |

| | |
|---|-----|
| Panel Discussion: | |
| Teacher Education between National Identity and Global Trends | 327 |
| <i>Kari Smith (chair) & Anna-Lena Østern</i> | |
| Sammendrag på norsk | 337 |
| Authors | 343 |
| List of authors' biographies | |
| | |
| Appendix: Paper presentations at the NAFOL Conference | |
| in May 2012 | 347 |
| Papers, posters and round table discussion | |

Foreword and Acknowledgements

The NAFOL Year Book 2012, *Teacher Education Research between National Identity and Global Trends*, is a scientific anthology with contributions from lecturers, invited guest professors, key note speakers, and PhD students in some way connected to the national graduate school for teacher education, NAFOL, during 2012. The anthology is thought of as an innovation combining the characteristics of a year book of a journal and those of a conference anthology. The anthology is divided into four parts, with specific features in each.

In part I the researchers contribute with texts about central issues and controversies in education and educational research. Parts 2 and 3 consist of conference proceedings from NAFOL's conference of 15th May 2012 in Trondheim, "Teacher Education between National Identity and Global trends".

In part 2 the focus is on the conference theme "Teacher Education between National Identity and Global Trends" through the key notes presented at the conference.

In part 3 some of the papers presented by PhD students at the conference are elaborated into article format.

In part 4 three academic conference genres are problematized and exemplified: the poster, the symposium, and the panel discussion.

The last section is a Summary (Sammendrag) in Norwegian of the articles in the anthology.

The Appendix contains a list of all paper presentations, poster presentations and a round table at the conference.

We thank all the authors for their contributions, and thank the reviewers of the articles for their responses and suggestions in acting as a quality guarantee of the academic standard. We thank John Shepherd for his careful proofreading of the texts and making the English language more readable. We thank Torill Ryghaug for her efforts in giving the articles a good layout,

and Monika S Nyhagen for her technical editing in the final phase, including control of the reference style. We also thank Hannah Kaihovirta-Rosvik for designing the cover.

We wish to address the reader of this Year Book with a quote from the article written by Inga Bostad and Lars Løvlie: *A lively and healthy democracy is not only built upon education; it must be aware of the difference between an educated person and someone with insight, capable of using knowledge to create a better world, meaning a world with equality, dignity and freedom, as well as a place for critical reflection, where political, religious and moral discussions are encouraged.*

The aim of this year book is to contribute to research based knowledge in teacher education, and we hope it will find its target readers!

The editors

Part 1

This article has been subject to blind review.

Response of the National Graduate School for Teacher Education, NAFOL, to the Call for a More Research Based Teacher Education in Norway

Anna-Lena Østern, Norwegian University of Science and Technology, Norway
Kari Smith, University of Bergen, Norway

The article discusses a common, yet blurred concept of “research based teacher education”. It describes the action taken in Norway to concretize the political and academic claim for making the education of teachers more research based. The focus is on the process leading up to the establishment of a Norwegian national graduate school in teacher education (NAFOL), as well as on the structure of the school as it has unfolded during the first three years of its planned period of seven years. The aim of the initiative of developing an innovative concept for a national graduate school (2010-2016) was to create a knowledge base in teacher education and to improve the quality of educational research in Norway. This was done within an inclusive network of teacher education institutions in dialogue with international research communities. Through NAFOL we try to give meaning to the concept A Research Based Teacher Education to avoid it becoming another buzzword without a structure which puts the concept into practice in a meaningful way.

Key words: Innovation, Graduate School Concept, Teacher Education, Practice-Oriented Research

The blurred concept of research based teacher education

An internationally agreed upon requirement for teacher education these days is that it should be research based. However, when it comes to defining what a research based teacher education entails; there is less agreement, or even little understanding of what it means. In this article we will examine some of the blurred issues related to the concept Research Based Teacher Education.

Consumers or producers of research?

A major question is the role of research in teacher education. Does research based teacher education mean that research is consumed by teacher educators and students? Published research is brought in as part of the lectures, course readings and in the students' assignments. Skills and techniques are sometimes taught and practiced by teacher educators because they can refer to research which has shown that certain techniques have worked well in other contexts, there is evidence of success. In such a scenario, teacher education can be perceived by some to be research based and the actors (teacher educators and students) consumers of research.

Another understanding of the concept is that teacher educators and students become producers of research. In this case, teacher educators draw upon their own research in lectures and seminars, and the approach to student learning is research based, the students find answers to questions they may ask by engaging in systematic enquiries about selected issues. In such a scenario teacher educators and students are producers of research. However, anybody who has been involved in any form of research activity knows that being a consumer of research is an integral part of conducting and producing research.

Murray & Male (2005) claim that teacher educators mainly act as consumers of research as many teacher educators' primary expertise is teaching and practical aspects related to teacher education. They come into higher education directly from school teaching and are often selected by other teacher educators due to their expertise in teaching. For these teachers, in the role of teacher educators, a research based teacher education would, to a large extent, mean that they expose students of teaching to relevant research literature. However, there are also teacher educators, mainly teaching the subject disciplines, who come into teacher education as researchers holding a doctorate, and they have not experienced school as teachers, only as students and, perhaps, parents. For this group of teacher

educators, who have entered teacher education directly from the academy, research is their primary expertise. They are likely to interpret a research based teacher education as being active producers of research (Smith, 2011a).

The question is whether research based teacher education has room for both approaches, or does one overtake the other? The situation in Norway has, for a long time, been that teacher educators, in university colleges mainly, are recognized for their expertise in teaching, whereas, currently, there is an increasing demand for all teacher educators to be engaged in producing research. The ideal teacher educator aiming at contributing to a research based teacher education should have teaching experience and also be an active and highly qualified researcher. The challenge is that there are not too many of that kind around.

What kind of research?

Other questions to be examined are what do we define as research, and what kind of research should a research based teacher education entail? Educational research has long ago moved away from only looking at positivistic research as accepted research, and ethnographic and hermeneutic as well as phenomenological approaches are common. Quantitative as well as qualitative methods are applied, probably with a preferred tendency towards qualitative methods. This is a development which, if it takes over educational research completely, might in the long run prove not to be beneficial to the field. A research based teacher education needs to draw on a diverse selection of high quality research. The criteria for research should be the quality of the research and not the methods of investigation.

An important role that research plays in teacher education is to build a strong bridge across the notorious gap between theory and practice. Students frequently question the role of theory in learning to become teachers, and teacher educators define their professional expertise to be either practical or theoretical (Murray & Male, 2005) and teach accordingly. There is, however, an increased acceptance of practice oriented research in teacher education, both in the consumption of as well as the production of such research. A simplified definition of educational practice-oriented research is that it conducts enquiries which are contextualised in the practice field, either in schools or teacher education institutions. When this kind of research takes place in schools, it might be an examination of teaching/learning practices in schools with the purpose of understanding the practice field. An alternative is to involve teachers in a kind of inter-

vention project, and then to document the process and outcomes of intervention, preferably jointly with teachers. In this way teachers become researching teachers, engaging in a systematic critical reflection over their own practice.

Currently, there is a strong tendency internationally (in Australia by John Loughran, the USA by Marilyn Cochran-Smith, The Netherlands by Fred Korthagen and Mieke Lunenberg, among many others) to encourage teacher educators working in academic institutions to engage in systematic and critical examination of their own teaching practice, mainly as action research (see McNiff et al., 2003), or in the form of self-studies (see Loughran et. al., 2004; Zeichner, 2007). This kind of practitioner research on own practice serves multiple purposes, all of which are related to the concept of research based teacher education. First, examination of one's own professional practice is meant to lead to improved practice, thereby improving the quality of teacher education. Second, when practitioner research is published nationally and internationally, the community of teacher educators share experiences and evidence based knowledge with teacher educators across borders. Evidence based knowledge about, in and with teacher education serves as the foundation for what John Loughran (2004) calls *the pedagogy of teacher education*. Thirdly, researching teacher educators act as models for the students by being open about how they, as teacher educators, continuously search for ways to improve their practice. In other words, they model what it entails to hold an attitude of enquiry as regards own practice, the importance of which is too often only preached.

We argue that practitioner research is an upgraded version of reflective practice, thus we warn against accepting reflection as research unless certain criteria are met. Reflection becomes research if there is a clear issue to be examined and improved, if it is supported by existing literature, if there is a systematic implementation and outcomes documentation, if there is transparent analysis of the documentation, and thoughts about future developments and enquiries. Finally, the process (study) should be presented to the professional community, such as to colleagues, a wider group of professionals, or in national or international conferences and journals (Smith, 2011b). Only when these criteria are met, can, as we see it, reflection processes be called research, and feed into the concept of research based teacher education.

Who are teacher educators?

Another, no less complex issue to discuss is who are the teacher educators who will engage in research based teacher education? Only institutional based teacher educators, or subject matter teachers and teachers for didactics and applied pedagogy, or should school-based teacher educators (mentors of student teachers' practice teaching) also be research active? Ideally, we would like to see all of the above actors being active in research when taking a comprehensive perspective of the concept research based teacher education. However, in reality the current situation is that mainly institutional based teacher educators engage in research, not always of their own choice, but often to comply with external demands. Academic promotion and institutional and personal financing in higher education are heavily based on the publication of research. Thus, we can see increasing research activity in teacher education in Norway and elsewhere. Capacity building of research communities in teacher education institutions is now on the agenda of many academic institutions (Hestbekk & Østern, 2011; Smith, 2012).

An increasingly greater part of teacher education takes place in schools (England, 2/3, Norway, integrated teacher education 8-13, 100 days as practicum), and the role of school based teacher educators (the mentors of student teachers' practice teaching) has become more central. Consequently, when talking about a research based teacher education, we cannot leave out the role of research in the clinical component of the education which is in the hands of teachers in their roles as mentors. To what extent are these professionals consumers and producers of research in their work as teacher educators? Long personal experience of teacher education (not systematically documented, thus not research based) suggests to us that research is not much used in school based teacher education. However, in Norway there are indications of change. As Norway is developing systems of accredited partner schools and mentor education, supported by policy documents (St.meld. 11 [White Paper 11], 2008-2009, National Framework for Primary Teacher Education, 2010), the opportunity to introduce research into the clinical component of teacher education is there, if we only know how to exploit it. Mentor education needs to be based on research, and mentor students (school based teacher educators) can be engaged in research (action research, self-study) as part of their course requirements. The aim is that we create a community of researching teacher educators whether based in higher education institutions or in schools.

Students as researchers in TE

An additional question when defining the concept of a research-based teacher education is the involvement of students in research. Commonly, students are viewed as consumers of research, especially at the early stages of their education. Our claim is that students can and should be involved with research from the very beginning of their education, by observing the practice field, by examining curricula, by looking critically at policy documents, etc. An integrated part of the pedagogy of teacher education is to develop a critical attitude in the students as regards their own practice and that of others. As they proceed in the education program, the issues under examination will differ and the methods of enquiry will expand. The above criteria for what can be called research should also apply to the students' research activity, and the presentations can be to peers or in the form of course assignments. Teacher education programmes should therefore be revisited to make enquiry a built-in component in the education. Having said this, it becomes more pressing that also school-based teacher educators (mentors) are research literate so they also can support the students' research engagement.

Conditions for research

Research-based teacher education is a comprehensive concept which we have tried to frame in the above discussion. However, considering the criteria for research which we have presented, it is clear that research is time-consuming. If we really want to have a research-based teacher education, there also have to be sufficient resources to support the claim. The situation in Norway currently is that mainly university based teacher educators have a time allowance to conduct research, whereas the situation is different for the majority of teacher educators in the many university colleges. They are required to be involved with research, but they are not given sufficient time to do so. As regards school based teacher educators, the situation is even worse. Most of them are not given extra time to mentor student teachers, and research time has not even been discussed. The lack of time will, in most cases, have a negative impact on the quality of the research carried out.

Advocating a research based teacher education is not too difficult, since there is wide support for this in research as well in policy documents. However, establishing research based teacher education is a challenge of another kind. It is an investment for the future, as it requires education, a change of tradition and attitude, and not least, resources. This requires

patient long-term planning by politicians as well as by academia. Norway has taken an important step in establishing a research based teacher education by investing in a national graduate school for teacher education, NAFOL.

NAFOL's conceptual background

Norway is a country with about 5 million people. The country has 32 teacher education institutions in university colleges and universities. Many of the university colleges are small. In 2004 a controversial report (Forskingsrådet, 2004) was published, where educational research was evaluated with a rather harsh critique. The writers of the report challenged the institutions to strengthen efforts within five areas: (1) research leadership and organization, (2) internationalisation, (3) thematic efforts and prioritization, (4) recruitment, and (5) national coordination and cooperation. A parliamentary White paper, "The Wish to research" [Vilje til Forskning] (St.meld. 20, 2004-2005), suggested that national graduate schools should be created. The task of the graduate schools was planned to be to contribute to strengthening quality in doctoral education. In an evaluation from 2006 (Hansén, 2006) on behalf of the Norwegian NOKUT (an organization which approves of research qualities in Norwegian teacher educations), teacher education for primary and secondary level was also criticised rather heavily.

In a dialogue seminar in 2012, organized by the Norwegian Research Council, the consequences of the strategies implemented were evaluated. Hansén (2012) concluded in his evaluation that the measures taken have had a great impact: the research culture in the institutions has been strengthened. Doctoral education has developed, and there is an overall increase in research publications. Also innovation, more visibility, more recruitment and strengthened professional self-confidence can be noticed among the institutions in educational research. In the current article we will discuss how a national graduate school for teacher education was designed, its conceptual background, and its implementation.

In a White paper from 2009 (St.meld. nr. 11, 2008–2009, p. 26) "The Teacher, the Role and Education" [Læreren – Rollen og utdanningen] the parliament announced that national graduate schools would be established in order to strengthen the teacher educators' competence in research and development. After one year of planning, NAFOL was launched in 2010 as a national graduate school for teacher education.

Establishing process

The aim of this section is to discuss the construction of an innovative concept for a Norwegian national graduate school for teacher education research (NAFOL). The graduate school is part of Norwegian educational research policy to qualify and thoroughly transform rather practice based teacher education into research based teacher education on a national level in Norway. This implies accepting more than 80 research students during the period 2010-2013 to participate in a national graduate school, in four cohorts. Each cohort can participate for four years in NAFOL during the years 2010-2016. The rationale for this project was the decision to have a research based teacher education, and the criticism of the quality of educational research mentioned earlier in this article. Furthermore, there was a wish to promote a sense of professional identity within teacher education research. The idea of a knowledge society's need for competence in different areas fuelled the idea of supporting teacher education research in different ways. Educational research is thus also extensively funded through two major research programs "Education 2020" [Utdanning 2020] and "PRAKUT" [Practice-based Educational Research]. NAFOL is part of the PRAKUT program.

What does NAFOL offer?

A battery of questions has guided the formation of the profile of the graduate school: What are the main features of an innovative graduate school focused on teacher education research? How is practice and theory in dialogue within the concept of the graduate school? What are the tools needed in order to mediate, scaffold and support an innovative educational research space for a diverse group of fresh researchers?

The graduate school NAFOL was launched in January 2010 with support from the Norwegian Research Council, and is steered by a consortium of 24 teacher education institutions (7 universities and 17 university colleges). They suggest about 20 students every year (over four years, and for a maximum period of 4 years) should gain entrance to the graduate school's activities (seminars, conferences, international seminars, and relevant PhD courses). An important prerequisite for being accepted is the relevance of the individual research topic for teacher education research. The research fellow salary is paid by the university or the college the student comes from, and the research fellow also applies to be included in a PhD program. Participation in the graduate school is an added value. With three cohorts

of students accepted, NAFOL now has 67 doctoral students in the program. In January 2013 the fourth and last cohort of about 20 PhD-students will be included in the graduate school. In this last cohort there are 38 applicants.

NAFOL activities are also offered for teacher educators who wish to qualify themselves without following a PhD-program. This alternative is based on a broader qualification, called “førstelektor”. In NAFOL this group can participate in PhD courses supported by NAFOL, and those who have qualified present articles in the process and get responses from qualified researchers. NAFOL also offers master degree supervision courses, and seminars for PhD supervisors in NAFOL. A bi-annual conference is arranged with a special focus on a certain theme, with PhD students invited to present research in progress.

In the graduate school the students have a thematic attachment to one of two main themes in the graduate school:

Theme 1 is “The teacher’s societal mandate, understanding of the profession, and development of the profession”

Theme 2 is “Didactics of subjects and of vocations”. The concept didactics is interpreted in the Nordic way as “curriculum and instruction”.

The structuring of the content of the graduate school challenges the notion of both theory and practice based research into teacher education. The effort is to use reflection codes from theory as well as from practice. Thus, using a concept borrowed from Niklas Luhmann (2000), an overlapping zone is formed, where the participants in the graduate school might become border crossers. The doctoral students are expected to communicate within both reflection codes, and to develop new reflection codes (cf. also Rasmussen, Kruse & Holm, 2007). Forms of knowledge (Gustavsson, 2000; Kemmis & Smith, 2007; Kvernbekk, 2001) are negotiated within this border zone. The graduate school can thus be considered as a construction of an educational research space (cf. Wahlström, 2010), a discursive space, negotiated and informed by Nordic and European trends in educational research (cf. Haug, 2010; Uljens, 2010) as well as by more global trends (cf. Apple, 2010) in the formation of education for the future (cf. Biesta, 2010; Dewey, 1910; Gardner, 2006).

During the four seminars arranged for a cohort during one year, some themes form integrated module based PhD courses, such as academic writing, research communication, theory of the profession for teacher educators, subject didactics as a research field, and the pedagogy of kindergarten education. Outside the seminars NAFOL supports PhD courses in different methods, in the theory of science and other relevant subject themes.

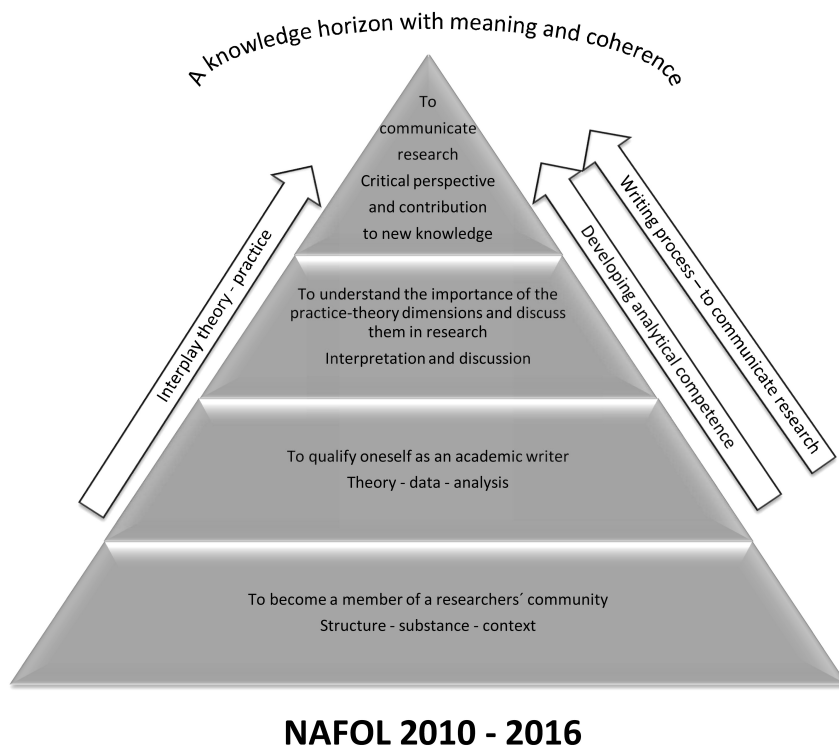


Figure 1. The structure of NAFOL's content for a four year period.

The structure for four years (Figure 1) is formed in a dynamic way, with invited lecturers and researchers for the themes explored in that specific seminar. A visiting professor contributes for a year or so in the graduate school. The leadership is well organised and administrative support is sufficient. Every cohort of students has a special coordinator, a professor organizing several workshops during the seminars of the graduate school. The basic principle is to scaffold the PhD students' progression in the research process by introductions to each phase intertwined with workshops, research communication and dialogues. The chosen structure shown in figure 1 is divided into four phases covering the four years: (1) To gain entrance into a research community (structure, substance, context), (2) to educate good researchers (theory, empirical data, analysis), (3) to understand the importance of research based knowledge regarding the practice-

theory dimension (interpretation and discussion) and (4) to communicate research (critical perspectives and contribution to new knowledge). Throughout the seminars analytical skills are trained and challenged.

Some students are invited to receive master class supervision on parts of their thesis in progress. In a master class other students can be the audience in the supervision session. In a process seminar, which a student requests, a researcher with expertise in the area of the research studied has read the manuscript, and asks challenging questions to the student, and also comments on the text. NAFOL also to some extent has cooperation with another national educational graduate school, NATED. The PhD students from one graduate school can participate in occasions arranged by the other. The bi-annual NAFOL conference is such a meeting place. At the conference innovations in research communication are planned and tried out, like poster presentations accompanied by poster mingle sessions (see also Østern & Strømme in this anthology).

During the years in the graduate school seminars with international cooperation are arranged. So far seminars have been arranged or are planned in Finland, Sweden, Denmark, Iceland, Holland and Germany. Internationalisation is strengthened through financial support for NAFOL students for periods as visiting researchers at a university abroad, a university with a certain expertise in a relevant teacher education field.

The dynamic innovative quality of the graduate school is contributed to by the lively interaction between the PhD students and organizers of the graduate school program, the continuous evaluation of each action taken, and the invitation to contribute to maintaining the NAFOL web page (www.nafol.net) updated by research blogs, conference blogs, letters from PhD students abroad, presentation of the NAFOL student of the week with summaries of the research project, and the presentations of visiting professors, and of supervisors of NAFOL students. A NAFOL Year Book contributes to the knowledge base shaped through NAFOL.

Another feature which is considered innovative is the double aim of the research school to function both as a scaffold for the PhD process, and also to form a basis for future teacher educators with an identity as researchers. The dialogue between the two levels is strengthened through the network formed by the students. This aspect makes the graduate school valuable in such a way that the meeting points in the graduate school are distinct values for the community of researchers.

Conclusion: The innovative aspects of NAFOL

The innovative aspects of the graduate school can be formulated in the following way:

It is national (not only local).

It recirculates and creates good ideas for doctoral education.

It is dynamic and sensitive to the needs of the students and of the society.

It is systematic.

It builds identity for becoming teacher educators, with a strong practice based research profile.

It builds upon cooperation both nationally and internationally.

The commitment of the PhD students to their network of teacher educators is a strength of the graduate school.

This articulation of the concept of a graduate school actively crossing the borders between different reflection codes thus represents an innovation in teacher education research.

The impact of the graduate school will be evaluated after four years (in 2014), and one important factor in this is how many students will have completed their PhD. Normally a research fellow at a teacher education institution has 25% work load and 75% for research during a period of four years. With the launching of a new teacher education in Norway for grades 1-7, 5-10 and 8-13 from autumn 2013, there will be a need for the competence of teacher educators with a PhD. In the discussion the suggestion to make Master's degree level the basic level for all teachers is prominent, and the question is more when than if this will be a reality. This Master's degree level has been the basis for Finnish teacher education for more than 30 years (cf. Jakku-Sihvonen & Niemi, 2006). On the other hand, the English concept Teach first! (2012) has also spread to Norway, and groups of academics without teacher education go into school as teachers with a minimum of theoretical background or research competence connected to the teaching profession.

Thoughts for the future

It is a challenge and privilege to be part of this innovative endeavour, touching the future. As a conclusion regarding the concept research based and its implementation in a national graduate school, we suggest some thoughts for the future.

The Norwegian PhD could be opened up in three directions in becoming qualified as a researcher. The (1) “førstelektor”- path could be designed with a strong focus on practice based research, (2) the arts PhD program could be included as an artistic path with a PhD as the final aim, and (3) the existing scientific PhD can stay in place. In a PhD. with professional focus these three directions in competence as a researcher are all needed.

Teacher education needs to allow for teacher educators with different primary expertise and provide for opportunities to strengthen their secondary expertise.

Research in teacher education should be varied, however, with strong focus on practice oriented research.

There must be a strong claim for quality in teacher education research, whether it is quantitative, qualitative or mixed methods research. The notion of quality needs to be problematized in discussions. The border crossing mentioned earlier in our article will consist of finding reflection codes which can guide practice.

Reflective practice is not necessary research unless it meets certain conditions such as being systematic, using previous research and producing some form for publication of the research.

The academic genres are continuously being challenged, because frozen genres do not suit well to the dynamic challenges given to research: to contributing with new knowledge about central issues in education. In a graduate school innovative themes can be analysed, discussed, criticized and published.

References

- Apple, M. (Ed.) (2010). *Global crises, social justice and education*. New York: Routledge.
- Biesta, G. J. J. (2010). Why ‘what works’ still won’t work. From evidence-based education to value-based education. *Studies in Philosophy and Education*, 29(5), 491-503.
- Dewey, J. (1997). *How we think*. (First published 1910.) New York: Dover.
- Gustavsson, B. (2000). *Kunskapsfilosofi*. Stockholm: Wahlström & Widstrand.
- Gardner, H. (2006). *Five Minds for the Future*. Boston, Mass: Harvard Business School Publishers.
- Hansén, S.-E. (2006). *Evaluering av allmennlærerutdanningen i Norge 2006*. Oslo: NOKUT. Nasjonalt organ for kvalitet i utdanningen.
- Haug, P. (Ed.) (2010). *Kvalifisering til læreryrket*. Oslo: Abstrakt Forlag.

- Hestbekk, T. & Østern, A-L. (2011). Praksisveilederen som lærerutdanner ønsker mer flyt i dialogen med lærerutdanningsinstitusjonen. *FoU i praksis konferanse-rapport 2010* (pp. 191-202). Trondheim: Tapir Akademisk Forlag.
- Jakku-Sihvonen, R. & Niemi, H. (2006). *Research-based teacher education in Finland: reflections by Finnish teacher educators*, 25. Turku: Suomen Kasvatustieteellinen Seura.
- Kemmis, S. & Smith, T. (Eds.) (2007). *Enabling praxis: challenges for education*. Rotterdam: Sense Publishers.
- Kvernbekk, T. (2001). *Erfaring, praksis og teori*. In T. Kvernbekk (Ed.), *Pedagogikk og lærerprofesjonalitet* (pp. 146-163). Oslo: Gyldendal Akademisk.
- Loughran, J. J., Hamilton, M. L., LaBoskey, V. K., & Russell, T. L. (Eds.) (2004). *The International Handbook of Self-Study of Teaching and Teacher Education Practices* (Volumes 1 & 2). Dordrecht: Kluwer Academic Publishers.
- Luhmann, N. (2000). *Samfundets uddannelsessystemer*. København: Hans Reitzels Forlag.
- McNiff, J., Whitehead, J., Lomax, P. (2003). *You and Your Action Research Project*. London: Routledge.
- Murray, J. & Male, T. (2005). Becoming a teacher educator: evidence from the field. *Teaching and Teacher Education*, 21, 125-142.
- Norges forskningsråd. (2006). *En nasjonal strategi for norsk pedagogisk Forskning. Oppfølgingsutvalgets anbefalinger etter Forskningsrådets evaluering i 2004*. Oslo: Forskningsrådet.
- Norges forskningsråd. (2004). *Norsk pedagogisk forskning. En evaluering av forskningen ved utvalgte universiteter og høyskoler*. Oslo: Forskningsrådet.
- Norwegian Ministry of Education and Research. (2010). National Curriculum Regulations for Differentiated Primary and Lower Secondary Teacher Education Programmes for Years 1–7 and Years 5–10.
- Rasmussen, J., Kruse, S., & Holm, C. (2007). Hvad konstituerer uddannelsesforskning? In J. Rasmussen, S. Kruse, & C. Holm (Eds.), *Viden om uddannelse. Uddannelsesforskning, pædagogik og pædagogisk praksis* (pp. 59-104). København: Hans Reitzels Forlag.
- Smith, K. (2011a). Forskning er utvikling i lærerutdanningen (Research is development in teacher education). *FoU i Praksis 2010* (pp. 31-44). Trondheim: Tapir Akademisk Forlag.
- Smith, K. (2011b). The multi-faceted teacher educator: A Norwegian perspective. *Journal of Education for Teaching: International Research and Pedagogy*, 37(3), 337-349.
- Smith, K. (2012). A systematic approach to conceptualizing and concretising teacher educators' research competence. International Symposium: Conceptualizing Teacher Educators' Work and Learning. *ECER Conference, 2012*, 18-21.

- St.meld. nr. 20. (2004-2005). *Vilje til Forskning*. Oslo: Det kongelige Utdannings- og forskningsdepartement.
- St.meld. nr. 11. (2008-2009). *Læreren – rollen og utdanningen*. Oslo: Det kongelige Utdannings- og forskningsdepartement.
- Teach first! (2012). *Teach first*. Retrieved Desember 01, 2012, from <http://www.uio.no/studier/emner/uv/ils/PPU3100T/> <http://www.teachfirstnorway.no/>
- Uljens, M. (2010). *(de)professionalisering i ett neoliberalt utdanningslandskap – Quo vadis Europa?* Retrieved November, 11, 2010, <http://www.nafol.net/nafol/uploads/Vedlegg/PDF-Bergen09nov10/NAFOL%20Uljens.pdf>
- Zeichner, K. (2007). Accumulating knowledge across self-studies in teacher education. *Journal of Teacher Education*, 58(1), 36-46.
- Wahlström, N. (2010). A European Space for Education Looking for Its Public. *European Educational Research Journal*, 9(4), 432-443.
- Østern, A-L. & Strømme, A. (forthcoming). The poster as a multimodal hybrid form of knowledge-exchange. In A-L. Østern, K. Smith, T. Ryghaug, T. Krüger, & M. B. Postholm (Eds.), *NAFOL Year Book 2012. Teacher Education Research between National Identity and Global Trends*. Trondheim: Akademika forlag.

This article has been subject to blind review.

Becoming Educationally Wise: Towards a Virtue-Based Conception of Teaching and Teacher Education

Gert Biesta, University of Luxembourg, Luxembourg

In this article I explore a conception of teaching that focuses on the essential role of judgements about what is educationally desirable in educational practices such as schools. Such judgements are not simply about the how of teaching but included an orientation on the why of teaching, that is, on questions of educational purpose. I argue that the capacity for making such judgements should not be understood in the languages of competencies but rather as a more holistic quality that characterises the teacher's professional being. Following Aristotle I refer to this quality as 'virtue' (ἀρετή) and hence suggests that teacher education should focus on the promotion of virtuosity in making wise educational judgements. By looking at the ways in which musicians develop and maintain their virtuosity I outline three parameters for a virtue-based conception of teacher education.

Key words: Virtue Based Conception of Teacher Education, Educationally Desirable, Teachers' Professional Being, Aristotle

Introduction: The fear of being left behind

In recent years policy makers and politicians have become increasingly interested in teacher education. In the UK the government has recently published a new policy framework for school education in England – a paper with the interesting title 'The Importance of Teaching'¹ – which not

¹ <http://www.education.gov.uk/b0068570/the-importance-of-teaching/> [Last accessed 2 August 2012]

only sets out the parameters for a significant transformation of state funded school education but also contains specific proposals for the education of teachers. In Scotland the government has recently commissioned a review of Scottish teacher education. This report, with the title 'Teaching Scotland's Future',² also makes very specific recommendations about teacher education and about the further professional development of teachers. These are just two examples of a trend that can be found in other countries as well (see, for example, US Department of Education, 2011; Expert/innengruppe Lehrer/innenbildung NEU, 2010). In addition to developments at national level, discussions about teacher education are increasingly being influenced by developments at the European level, particularly in the context of the Lisbon strategy – which, in 2000, set the aim of making the European Union “the most competitive and dynamic knowledge-based economy in the world”³ – and the Bologna Process – aimed at the creation of a European Higher Education Area, a process that was inaugurated in 1999. In the wake of the 2005 OECD report on the state of teacher education – a report called *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*⁴ – the European Commission produced a document in 2007 called *Improving the Quality of Teacher Education*⁵ which proposed “shared reflection about actions that can be taken at Member State level and how the European Union might support these”. As part of this process the European Commission also produced a set of *Common European Principles for Teacher Competences and Qualifications*.⁶ While none of these documents have any legal power in themselves, they do tend to exert a strong influence on policy development within the member states of the European Union.

One could see the attention from policy makers and politicians for teacher education as a good thing. One could see it as the expression of real concern for the quality of education at all levels and as recognition of the fact that the quality of teacher education is an important element in the overall picture. But one could also read it more negatively by high-

² <http://www.reviewofteachereducationinscotland.org.uk/teachingscotlandsfuture/index.asp> [Last accessed 2 August 2012]

³ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm [Last accessed 2 August 2012]

⁴ <http://www.oecd.org/education/preschoolandschool/48627229.pdf> [Last accessed 2 August 2012]

⁵ http://ec.europa.eu/education/com392_en.pdf [Last accessed 2 August 2012]

⁶ http://ec.europa.eu/education/policies/2010/doc/principles_en.pdf [Last accessed 2 August 2012]

lighting that now that governments in many countries have established a strong grip on schools through a combination of curriculum prescription, testing, inspection, measurement and league tables, they are now turning their attention to teacher education in order to establish total control over the educational system. Much, of course, depends on how, in concrete situations, discourse and policy will unfold or have unfolded already. In this regard it is interesting, for example, that whereas in the English situation teaching is being depicted as a *skill* that can be picked up in practice (with the implication that teacher education can be shifted from universities to so-called “training schools”), the Scottish discussion sees teaching as a *profession* which, for that very reason, requires proper teacher education, both with regard to teacher preparation and with regard to further professional development. While there are, therefore, still important differences 'on the ground,' we are, at the same time, seeing an increasing *convergence* in discourse and policy with regard to teaching which, in turn, is leading to a convergence in discourse and policy with regard to teacher education. The main concept that seems to be emerging in all of this is the notion of *competence* (see, for example, Deakin Crick, 2008; Mulder, Weigel & Collins, 2007; Biesta & Priestley, in press). Competence is an interesting notion for at least two reasons. Firstly, as mentioned, the notion of competence has a certain rhetorical appeal – after all, who would want to argue that teachers should *not* be competent? Secondly, the idea of competence focuses the discussion on the question of what teachers should be able to *do* rather than only paying attention to what teachers need to *know*. One could say, therefore, that the idea of 'competence' is more practical and, in a sense, also more holistic in that it seems to encompass knowledge, skills and action as an integrated whole, rather than to see action as, say, the application of knowledge or the implementation of skills. Whether this is indeed so also depends on the particular approach to and conception of competence one favours. Mulder, Weigel and Collins (2007) show, for example, that within the literature on competence there are three distinctive traditions, the behaviourist, the generic and the cognitive, which put different emphases on the 'mix' between action, cognition and values. While some definitions of competence are very brief and succinct – such as Eraut's definition of competence as “(t)he ability to perform the tasks and roles required to the expected standards” (Eraut 2003, p. 117, cited in Mulder, Weigel & Collins, 2007) – other definitions, such as, for example, Deakin Crick's definition of competence as “a complex combination of knowledge, skills, understanding, values, attitudes and desire which lead to effective, embodied human action in the world, in a particular domain” (Deakin Crick, 2008, p. 313), become so

broad that it may be difficult to see what is not included in the idea of competence.

What is worrying, therefore, is perhaps not so much the notion of competence itself – it is a notion with a certain appeal and some potential – but first and foremost the fact that the idea of competence is beginning to monopolize the discourse about teaching and teacher education. It is, therefore, first of all the convergence towards one particular way of thinking and talking about teaching and teacher education that we should be worried about. After all, if there is no alternative discourse, if a particular idea is simply seen as 'common sense,' then there is a risk that it stops people from thinking at all. While, as mentioned, European documents about teaching and teacher education have no *legal* power – decisions about education remain firmly located at the level of the member states – they do have important *symbolic* and *rhetorical* power in that they often become a reference point that many want to orientate themselves towards, perhaps on the assumption that if they do not adjust themselves to it, they run the risk of being left behind. We can see a similar logic at work in the problematic impact that PISA (OECD's Programme for International Student Assessment) has had on education throughout Europe. What I have in mind here is not the fact that PISA is only interested in particular 'outcomes' – although there are important questions to be asked about that as well – but first of all the fact that PISA and similar systems create the illusion that a wide range of different educational practices *is* comparable and that, by implication, these practices therefore *ought to* be comparable. Out of a fear of being left behind, out of a fear of ending up at the bottom end of the league table, we can see schools and school systems transforming themselves into the definition of education that 'counts' in systems like PISA. As a result more and more schools and school systems begin to become the same.

This is what can happen when a particular discourse becomes hegemonic, that is, when a particular discourse begins to monopolize thinking and talking. It is not so much that the discourse has the power to change everything, but rather that people begin to adjust their ways of doing and talking to such ideas. This leads to increased uniformity or, to put it from the other side, a reduction of diversity in educational thought and practice. The argument from biodiversity shows what is dangerous about such developments, as a reduction of diversity erodes the ability of a system to respond effectively and creatively to changes in the environment. Furthermore, the fact that the move towards uniformity is more often than not driven by fear, that is, driven by a lack of courage to think and act differently and independently, makes

such developments even more worrying, as we all know that fear is not really a good counselor.

But it is not only the tendency towards uniformity that is problematic here. It is also that through the discourse about competence, about the competent teacher and about the competences that teacher education should develop in teachers, that a very particular view about education is being repeated, promoted and *multiplied*. This is often not how ideas about the competences that teachers need are being presented. Such competences are often presented as general, as relatively open to different views about education, as relatively neutral with regard to such views, and also as relatively uncontested. They are, in other words, presented as 'common sense.' One thing that is important, therefore, is to open up this common sense by showing that it is possible to think *differently* about education and about what teachers should be able to do, at least in order to move away from an unreflective common sense about education. I also wish to argue, however, that the particular 'common sense' about education that is being multiplied is problematic in itself, because it has a tendency to promote what I would see as a rather un-educational way of thinking about education. And this is the deeper problem that needs to be addressed in order to have a better starting point for our discussion about the future of teaching and teacher education. Let me try to explain what I have in mind.

The 'learnification' of education

There are a number of places where we could start, but I invite you to look briefly at the key competences enlisted in the document from the Directorate-General for Education and Culture of the European Commission, called *Common European Principles for Teacher Competences and Qualifications*.

Making it work: the key competences

Teaching and education add to the economic and cultural aspects of the knowledge society and should therefore be seen in their societal context. Teachers should be able to:

Work with others: they work in a profession which should be based on the values of social inclusion and nurturing the potential of every learner. They need to have knowledge of human growth and development and demonstrate self-confidence when engaging with others. They need to be able to

work with learners as individuals and support them to develop into fully participating and active members of society. They should also be able to work in ways which increase the collective intelligence of learners and co-operate and collaborate with colleagues to enhance their own learning and teaching.

Work with knowledge, technology and information: they need to be able to work with a variety of types of knowledge. Their education and professional development should equip them to access, analyse, validate, reflect on and transmit knowledge, making effective use of technology where this is appropriate. Their pedagogic skills should allow them to build and manage learning environments and retain the intellectual freedom to make choices over the delivery of education. Their confidence in the use of ICT should allow them to integrate it effectively into learning and teaching. They should be able to guide and support learners in the networks in which information can be found and built. They should have a good understanding of subject knowledge and view learning as a lifelong journey. Their practical and theoretical skills should also allow them to learn from their own experiences and match a wide range of teaching and learning strategies to the needs of learners.

Work with and in society: they contribute to preparing learners to be globally responsible in their role as EU citizens. Teachers should be able to promote mobility and co-operation in Europe, and encourage intercultural respect and understanding. They should have an understanding of the balance between respecting and being aware of the diversity of learners' cultures and identifying common values. They also need to understand the factors that create social cohesion and exclusion in society and be aware of the ethical dimensions of the knowledge society. They should be able to work effectively with the local community, and with partners and stakeholders in education – parents, teacher education institutions, and representative groups. Their experience and expertise should also enable them to contribute to systems of quality assurance. Teachers' work in all these areas should be embedded in a professional continuum of lifelong learning which includes initial teacher education, induction and continuing professional development, as they cannot be expected to possess all the necessary competences on completing their initial teacher education.⁷

⁷ From http://ec.europa.eu/education/policies/2010/doc/principles_en.pdf [Last accessed 2 August 2012]

There is, of course, a lot that can be said about this text, and I would say that documents like these do require careful and detailed critical analysis. For the purpose of this article I would like to make two observations. The first is that in this text school-education is very much positioned as an instrument that needs to deliver all kinds of societal goods. Education needs to produce such things as social cohesion, social inclusion, a knowledge society, life-long learning, a knowledge economy, EU citizens, intercultural respect and understanding, a sense of common values, and so on. In terms of its agenda this is a very *functionalist* view of education and a very *functionalist* view of what is core to what teachers need to be able to do. It paints a picture where society – and there is of course always the question of what 'society' actually 'is' and whose particular interests are represented in it – sets the agenda, and where education is seen as an instrument for the delivery of this agenda. In this text the only 'intellectual freedom' granted to teachers is about *how* to 'deliver' this agenda, not about what is supposed to be 'delivered.' (I put 'delivery' in quotation marks to highlight that this in itself is a very unfortunate and unhelpful metaphor to talk about education.) This functionalist or instrumentalist view of education does not seem to consider the idea that education may have other interests – perhaps its own interests (I return to this below) – but predominantly thinks of the school as the institution that needs to solve 'other people's problems,' to put it briefly.

My second observation concerns the fact that in this text education is predominantly described in terms of *learning*. We read that teachers are supposed to nurture the potential of every learner, that they need to be able to work with learners as individuals, that they should aim at increasing the collective intelligence of learners, that they should be able to build and manage learning environments, integrate ICT effectively into learning and teaching, provide guidance and support to learners in information networks, and view learning as a lifelong journey. For me, therefore, this document is another example of what elsewhere (see particularly Biesta 2004, 2006) I have referred to as the rise of a 'new language of learning' in education. This rise is manifest in a number of 'translations' that have taken place in the language used in educational practice, educational policy and educational research. We can see it in the tendency to refer to students, pupils, children and even adults as 'learners.' We can see it in the tendency to refer to teaching as the facilitation of learning or the management of learning environments. We can see it in the tendency to refer to schools as 'places for learning' or as 'learning environments.' And we can see it in the tendency no longer to speak about adult education but rather to talk about lifelong learning.

One could argue that there is no problem with this. Is it not, after all, the purpose of education that children and students learn? Is it therefore not reasonable to think of the task of teachers as that of supporting such learning? And doesn't that mean that schools are and should be understood as learning environments or places for learning? Perhaps the quickest way to make my point is to say that for me the purpose of education is *not* that children and students learn, but that they learn *something* and that they do so with reference to particular *purposes*. A main problem with the language of learning is that it is a language of *process*, but not a language of content and purpose. Yet education is never just about learning, but is always about the learning of something for particular purposes. In addition I wish to argue that education is always about learning from someone (or to be more precise: being taught by someone; on this distinction see Biesta, in press). Whereas the language of learning is an *individualistic* language – learning is after all something you can do on your own – the language of education is a *relational* language, where there is always the idea of someone educating someone else. The problem with the rise of the language of learning in education is therefore threefold: it is a language that makes it more difficult to ask questions about *content*; it is a language that makes it more difficult to ask questions of purpose; and it is a language that makes it more difficult to ask questions about the specific role and responsibility of the teacher in the educational *relationship*.

All this is not to say that learning is a meaningless idea, or that learning has no place in education. But it is to highlight the fact that the language of learning is not an *educational* language in itself, so that when discussions about education become entirely framed in terms of learning, some of the most central educational questions and issues – about purpose, content and relationships – begin to disappear from the conversation and, subsequently, run the risk of beginning to disappear from the practice of education too. In my own work I have referred to this development as the 'learnification' of education (see Biesta, 2010a). I have deliberately constructed an ugly word for this because, from the standpoint of education, I think that this is a very worrying trend. While, as mentioned, the idea of competence is therefore, in itself, not necessarily bad, I am concerned about the way in which it is multiplying a particular view about education through a particular language about education, the language of learning. This means that if we wish to say anything *educational* about teacher education, if, in other words, we wish to move beyond the language of learning, we need to engage with a way of speaking and thinking that is more properly educational. Once we do this we may find – and this is what I will be arguing below – that the idea

of competences becomes less attractive and less appropriate to think about teacher education and its future. Let me move, then, to the next step in my argument, which has to do with the nature of educational practices.

What is education for?

Let me begin with a brief anecdote. In Scotland experienced teachers have the opportunity to follow a specially designed master's programme in order to obtain a higher qualification. Teachers who have successfully gone through this programme can call themselves 'chartered teachers' (just like, for example, chartered accountants or chartered surveyors). One of the things that the teachers studying on this programme need to be able to do is show that through the conduct of small scale inquiry projects they can *improve* their practice. I have supervised a number of these projects, and what I found interesting and remarkable is that while most of the teachers were able to provide evidence of the fact that they had been able to *change* their practice, they found it quite difficult to articulate why such changes would count as an *improvement* of their practice. Quite often they thought, at least initially, that a change in practice is automatically an improvement, until I showed them that each time a practice has changed we can still ask the question why such change is an improvement, that is, why that change is *desirable* change, why the new situation is *better* than what existed before. There is, however, only one way in which this question can be answered and that is through engagement with the question what education is *for*, that is, with questions about the purpose of education. It is, after all, only if we are able to articulate what it is we want to achieve, that we can judge whether a change in practice gets us closer to this or further away from it.

As I have already said, the language of learning is utterly unhelpful here, because if we just say that students should learn or that teachers should support or promote students' learning but do not specify what the learning is supposed to achieve or result in, we are actually saying nothing at all. This shows something particular about educational practices, namely that they are *teleological* practices – the Greek word 'telos' meaning aim or purpose – that is, practices that are *constituted* by certain aims. In my own work – particularly the book *Good education in an age of measurement* (Biesta, 2010a) – I have therefore argued that if we want to move back from a language of 'learning' to language of 'education,' we need to engage explicitly with the question of purpose. I have referred to this as the question of good education in order to highlight that when we engage

with the question of purpose in education we are always involved in value judgements, in judgements, that is, about what is educationally desirable. The idea of 'good education' is also there as an alternative for the idea of 'effective education,' because one can have effective processes that lead to undesirable outcomes.

By arguing that there is a need to engage with the question of educational purpose, I am not trying to define what the purpose of education should be. But I do wish to make two points about how I think we should engage with the question of purpose. The first point is that in my view educational practices always serve more than one purpose – and do so at the very same time. The *multi-dimensionality of educational purpose* is precisely what makes education interesting. It is also, and this is my second point, the reason why a particular kind of judgement is needed in education. By saying that the question of educational purpose is multi-dimensional, I am trying to say that education 'functions' or 'works' in a number of different dimensions or domains and that in each of these domains the question of purpose needs to be addressed. In my own work I have suggested that we can distinguish three domains in which the question of purpose needs to be raised – or to put it in more simple language: I have suggested that educational processes and practices tend to function in three different domains. I have referred to these as *qualification*, *socialisation* and *subjectification* (see Biesta, 2010a; see also Biesta, 2009). *Qualification* has to do with the ways in which education qualifies people for doing things – in the broad sense of the word – by equipping them with knowledge, skills and dispositions. This is an important dimension of school education and some would even argue that it is the only thing that should matter in schools. Education is however not only about knowledge, skills and dispositions but also has to do with the ways in which through education we become part of existing social, cultural and political practices and traditions. This is the *socialisation* dimension of education where, to put it in more general terms, the orientation is on the 'insertion' of newcomers into existing orders. 'Newcomers' here can both be children and those who arrive in a new place, such as immigrants. We can also think here of the ways in which education introduces newcomers into particular professional orders and cultures. While some, as mentioned, take a very strict and narrow view of education and would argue that the only task of schools is to be concerned about knowledge and skills and dispositions, over the past decades the socialisation function has become an explicit dimension of discussions about what schools are for. We can see this specifically in the range of societal 'agendas' that have been added

to the school curriculum, such as environmental education, citizenship education, social and moral education, sex education, and so on. The idea here is that education not only exerts a socialising force on children and students, but that it is actually desirable that education should do this.

While some people would argue that these are the only two proper and legitimate dimensions that school education should be concerned about, I wish to argue that there is a third dimension in which education operates and should operate. This has to do with the way in which education impacts on the person. In the English language it is not easy to find the right concept here, as I would argue that this dimension has to do with the subjectivity of the human person – a notion that probably works slightly better in the German language: 'Subjektivität' and 'Subjekt werden' – which is why I have referred to this dimension as the *subjectification* dimension of education. It is important to see that subjectification and socialisation are not the same – and one of the important challenges for contemporary education is how we can actually articulate the distinction between the two (for more on this, see Biesta, 2006). Socialisation has to do with how we become part of existing orders, how we identify with such orders and thus obtain an identity; subjectification, on the other hand, is always about how we can exist 'outside' of such orders, so to speak. With a relatively 'old' but still crucially important concept, we can say that subjectification has to do with the question of human freedom – which, of course, then raises further questions about how we should understand human freedom (for my ideas on this, see again Biesta, 2006; and also Chapter 4 in Biesta, 2010a).

To engage with the question of purpose in education, so I wish to suggest, requires that we engage with this question in relation to all three domains. It requires that we think about what we aim to achieve in relation to qualification, socialisation and subjectification. The reason why engagement with the question of purpose requires that we 'cover' all three domains, lies in the fact that anything we do in education potentially has 'impact' in any of these three domains. Here it is important to acknowledge that the three domains are *not separate*. A useful way to depict them is through a Venn-diagram of three overlapping areas.



The overlap is important because, on the one hand, this indicates opportunities for *synergy*, whereas, on the other hand, it can also help us to see potential *conflicts* between the different dimensions. An example of potential synergy is the way in which in vocational education the teaching of particular skills at the same time functions as a way to socialise students into particular domains of work, into the professional responsibility that comes with it, and so on. An example of potential conflict is where a constant emphasis on testing and exams, which is perhaps an effective way to drive up achievement in the domain of qualification, can have a negative impact on the domain of subjectification if it teaches students, for example, that competition is always better than cooperation.

Given the possibility of synergy and of conflict, and given the fact that our educational activities almost always 'work' in the three domains at the very same time, looking at education through these dimensions begins to make visible something that in my view is absolutely central about the work of teachers, which is the need for making situated judgements about what is educationally desirable in relation to these three dimensions. What is central to the work of teachers is not simply that they set aims and implement them. Because education is multi-dimensional teachers constantly need to make judgements about how to balance the different dimensions; they need to set priorities – which can never be set in general but always need to be set in concrete situations with regard to concrete students – and they need to be able to handle tensions and conflict and, on the other hand be able to see possibilities for synergy. All this is at play in this simple

distinction between 'change' and 'improvement.' Answering the question of whether change is improvement is, therefore, not only a matter of assessing progress towards one particular aim. Because of the multidimensionality of education we always need to consider the possibility that gain with regard to one dimension may be loss with regard to another.

What is beginning to emerge from this line of thinking is the idea that because education is a teleological practice and because the question of the 'telos' of education is a multi-dimensional question, judgement – judgement about what is educationally desirable – turns out to be an absolutely crucial element of what teachers do. Before I say more about this in order to link it to the question of teacher education, let me make three brief further points about the approach to the question of purpose in education I have outlined above.

Firstly: while I would argue that all education in some way impacts in the three domains – qualification, socialisation, and subjectification – different schools' concepts do this in quite different ways. They have different priorities in relation to the three dimensions and these priorities, in a sense, characterise their educational outlook. It is at least crucial that schools are able to *articulate* their position, are able to articulate what their priorities are and what they want to stand for – and it is my experience that the distinction between the three domains and the representation of them in a Venn diagram provides a helpful set of tools which schools can use to become clearer about what it is they prioritise and what it is they ultimately stand for. Secondly: next to the question of the articulation of this – which is about providing clarity – there is, of course, also the question of the *justification* of a particular school concept, that is the justification of why a particular position and a particular way of prioritising is considered to be desirable. By being able to articulate one's position it becomes at least easier to see what it is that needs to be justified. Thirdly: there is, of course, the question of whether some school concepts – or wider conceptions of education – are more desirable than others. My own view here is that education – if it is education and not, say, training or brainwashing – should always have an explicit concern for the person and the question of the freedom of the person, which, as mentioned before, leaves open what it means to be concerned about the person and about the freedom of the person.

Judgement and wisdom in education: Becoming educationally wise

What is emerging from the discussion so far is that the question is not so much whether teachers should be competent to do things – one could say that, of course, they should be competent – but that competence, the ability to do things, is in itself *never enough*. To put it bluntly: a teacher who possesses all the competences teachers need but who is unable to judge which competence needs to be deployed when, is a useless teacher. Judgements about what needs to be done always need to be made with reference to the purposes of education – which is why the language of learning is unhelpful as it is not a language in which the question of purpose can easily be raised, articulated and addressed. And since the question of purpose of education is a multidimensional question, the judgement that is needed must be *multidimensional*, taking into consideration that a gain with regard to one dimension may be a loss with regard to another – so that there is a need to make a judgement about the right *balance* and the right '*trade off*' between gains and losses, so to speak. Making such judgements is not something that is done at the level of school policy documents, but lies at the very heart of what goes on in the classroom and in the relationships between teachers and students – and this goes on again, and again, and again.

While some might argue that this is an argument for saying that teachers need to be competent in making educational judgements, I would rather want to see the capacity for judgement as something different from competences. Part of my argument for this is that if we would see the ability to make educational judgements as a competence, it would be the one and only competence on the list. But we could also say that to the extent that there is something reasonable in the idea that teachers should be competent in doing certain things, there is always the further need to judge when it is appropriate to do what.

A similar argument for the fundamental role of educational judgements can be made in relation to another tendency in recent discussions about teaching and teacher education, which is the idea that teaching should develop into an evidence-based profession just as, for example, medicine or agriculture (see Biesta 2007, 2010b, 2010c). One aspect of this discussion that is relevant for my argument in this article is the suggestion that rather than that education should rely on the judgement of professionals it should be based on scientific evidence about 'what works.' The idea is that such evidence can only be generated through large scale experimental studies with a treatment group and a control group. Only such research, so

it is argued, can reveal whether particular treatments or interventions work, and if the research does show this, then, so the argument goes, we have an evidence-base for educational practice.

There are many questions that can be asked about these ideas, such as the question whether teaching can meaningfully be understood as a treatment or intervention – and I wish to suggest it can not – or whether students should be seen just as willing 'objects' of treatments or interventions – which, again, in my view does not make sense. But even if, for the sake of argument, we concede that it might be possible to conduct the kind of studies suggested above, the outcomes of those studies are limited in two ways. One point is that such studies at most give us knowledge about *the past*. That is, they give us knowledge about what may have worked in the past, but there is no guarantee whatsoever – at least not in the domain of human interaction – that what has worked in the past will also work in the future. This already means that such knowledge can at most give us possibilities for action, but never rules or prescriptions. While it may therefore have the possibility to *inform* our judgements, it cannot *replace* our judgements about what needs to be done. Judgement is also important because something that may work in relation to one dimension of education may actually have a detrimental effect in relation to another dimension. (An example of this is the whole medicalisation of education – partly in the domain of diagnoses such as ADHD and partly through the use of drugs such as Ritalin – which may perhaps have positive effects on cognitive achievement, but is most likely to have quite negative effects in the domain of subjectification.)

Just as competences in themselves are not enough to capture what teaching is about, the idea of education as an evidence-based profession also doesn't make sense in itself. What is missing in both cases is an acknowledgement of the fundamental role of educational *judgement*. Particularly with regard to the latter discussion – that is, about the role of scientific evidence – there is a connection with a much older question in the educational literature, which is whether teaching should be understood as an art of a science. I think that it is important to pose this question again in our times, not in the least because of the strong push to bring (a certain conception of) science into education. One person who has very concisely and very convincingly argued against the idea of teaching as a science is one of the founding fathers of American psychology, William James (1842-1910). In his *Talks to Teachers* we find:

Psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application, by using its originality.

The most such sciences can do is to help us to catch ourselves up and check ourselves, if we start to reason or to behave wrongly; and to criticize ourselves more articulately after we have made mistakes.

To know psychology, therefore, is absolutely no guarantee that we shall be good teachers. To advance to that result, we must have an additional endowment altogether, a happy tact and ingenuity to tell us what definite things to say and do when the pupil is before us. That ingenuity in meeting and pursuing the pupil, that tact for the concrete situation, though they are the alpha and omega of the teacher's art, are things to which psychology cannot help us in the least. (James, 1899, pp. 14-15)

While James provides a convincing argument why teaching should not and cannot be understood as a science – and actually needs tact, ingenuity and, so I wish to add, judgement – James has less to say about the positive side of the argument, that is, the idea that education should therefore be understood as an art. A thinker who in my view still has something very important to say about this question is Aristotle (384-322 BC), and the interesting point he raises is not just whether teaching is an art or not, but *what kind of art* teaching actually is (see Aristotle, 1980).

Aristotle's argument starts from the distinction between the theoretical life and the practical life. While the theoretical life has to do with “the necessary and the eternal” (Aristotle 1980, p. 140) and thus with a kind of knowledge to which Aristotle refers as science (*episteme*), the practical life has to do with what is 'variable' (ibid., p. 142), that is with the world of change. This is the world in which we act and in which our actions make a difference. What is interesting about Aristotle's ideas about our engagement with the world of change is that he makes a distinction between two modes of acting in the domain of the variable: '*poiesis*' and '*praxis*' or, in Carr's (1987) translation, 'making action' and 'doing action.' Both 'modes' of action require judgement, but the kind of judgement needed is radically different, and this is an important insight for the art of education. *Poiesis* is about the production or fabrication of things – such as, for example, a saddle or a ship. It is, as Aristotle puts it, about “how something may come into being which is capable of either being or not being” (which means that it is about the variable, not about what is eternal and necessary), and

about things “whose origin is in the maker and not in the thing made” (which distinguishes *poiesis* from biological phenomena such as growth and development) (Aristotle, 1980, p. 141). *Poiesis* is, in short, about the creation of something that did not exist before. The kind of knowledge we need for *poiesis* is *techne* (usually translated as ‘art’). It is, in more contemporary vocabulary, technological or instrumental knowledge, “knowledge of how to make things” (ibid, p. 141). Aristotle comments that *poiesis* “has an end other than itself” (ibid, p. 143). The end of *poiesis* is *external* to the means, which means that *techne*, the knowledge of how to make things, is about finding the means that will produce the thing one wants to make. *Techne* therefore encompasses knowledge about the materials we work with and about the techniques we can apply to work with those materials. But making a saddle is never about simply following a recipe. It involves making judgements about the application of our general knowledge to *this* piece of leather, for *this* horse, and for *this* person riding the horse. So we make judgements about application, production and effectiveness as our focus is on producing something – or to be more precise: producing some *thing*.

But the domain of the variable is not confined to the world of things, but also includes the social world; the world of human action and interaction. This is the domain of *praxis*. The orientation here, as Aristotle puts it, is not towards the production of things but to bringing about ‘goodness’ or human flourishing (*eudamonia*). *Praxis* is “about what sort of things conduce to the good life in general” (ibid, p. 142). It is about good action, but good action is not a means for the achievement of something else. “(G)ood action itself is its end” (ibid, p. 143). The kind of judgement we need here is not about *how* things should be done; we need judgement “about *what is to be done*” (ibid; emphasis added). Aristotle refers to this kind of judgement as *phronesis*, which is usually translated as practical wisdom. *Phronesis* is a “reasoned and true state of capacity to act with regard to human goods” (ibid, p. 143).

Two points follow from this. The first has to do with the nature of education. Here, I would argue, with Aristotle, that we should never think of education *only* as a process of production, that is, of *poiesis*. While education is clearly located in the domain of the variable, it is concerned with the interaction between human beings, not the interaction between human beings and the material world. Education, in other words, is a social art and the aesthetics of the social is in important ways different from the aesthetics of the material (which is not to say that they are entirely separate). This does not mean that we should exclude the idea of *poiesis* from our educational thinking. After all, we do want our teaching and our curricula to have

effect and be effective; we do want our students to become good citizens, skilful professionals, knowledgeable human beings; and for that we do need to think about educational processes in terms of *poiesis*, that is, in terms of bringing about *something*. But that should never be the be all and end all of education. Education is always more than just production, than just *poiesis*, and ultimately education is precisely what production/*poiesis* is not because at the end of the day we, as educators, cannot claim that we produce our students; instead, we educate them, and we educate them *in* freedom and *for* freedom. That is why what matters in education – what makes education educational – does not lie in the domain of *poiesis* but in the domain of *praxis*. (Which is one of the reasons why the whole idea of evidence-based practice in education does not really make sense, at it is based on a *poiesis* model, which might work for potatoes, but not for human beings.) It shows, in other words, why education is a social art and not a material art.

The second point I wish to make is that practical wisdom, the kind of wisdom we need in relation to *praxis* with the intention to bring about goodness, captures quite well what I have been saying about educational judgement. Educational judgements are, after all, judgements about what needs to be done, not with the aim of producing something in the technical sense, but with the aim of bringing about what is considered to be educationally desirable (in the three overlapping domains I have identified). Such judgements are, therefore, not 'technical' judgements, but value judgements. What Aristotle adds to the picture – and this is important for developing these views about education into views about teacher education – is that practical wisdom is not to be understood as a set of skills or dispositions or a set of competences, but rather it denotes a certain quality or excellence of the person. The Greek term here is *ἀρετή* and the English translation of *ἀρετή* is virtue. The ability to make wise educational judgements should therefore not be seen as some kind of 'add on,' that is, something that does not affect us as a person, but rather denotes what we might call a holistic quality, something that permeates and characterises the whole person – and we can take 'characterise' here quite literally, as virtue is often also translated as 'character.'

The question is therefore not how we can learn *phronesis*. The question rather is, how we can become a *phronimos*; how can we become a practically wise *person*. And more specifically the question is: how can we become an *educationally wise person*. This, so I wish to suggest, is the question of teacher education, and in the final step I will draw some conclusions and make some observations about what all this might mean for the future of teacher education.

Becoming educationally wise

I have arrived at the central question of this article, which is the question of teacher education. That it took me a while to get here has to do with the fact that in order to say anything about teacher education we first need to get a sense of how we wish to understand teaching – and here I have put forward what we might call a virtue-based conception of teaching, a conception that puts the ability for educational judgements at the very centre of the 'art' of teaching – and in order to do that, I had to say a few things about education so that we were in a position to speak about teaching in an *educational* manner, rather than just in terms of learning. Where I ended up with these reflections was with the conclusion that teachers need to develop the ability to make wise educational judgements. This, as I have indicated, should not be seen as a skill or competence, but should rather be understood as a quality of the person. Where I ended up, in other words, is in arguing that the overarching aim of teacher education should be the question of how teachers can become educationally wise. This is not about the acquisition of *phronesis*, but about how a teacher can become a *phronimos*, or, to be more precise, how a teacher can become an *educational* *phronimos*, so to speak.

But how might this be done? One interesting observation Aristotle makes in relation to this is that he says “that a young man of practical wisdom cannot be found” (ibid, p. 148). What he is saying here is that wisdom is something that comes with age or perhaps it is better to say that wisdom comes with *experience*. This is one important point for teacher education, to which I will return below. The second point that is relevant here is that when Aristotle comes to points where one would expect him to define what a practically wise person looks like, he does not come up with a description of certain traits or qualities, but actually comes up with examples – and one main example in Aristotle's writings is Pericles. Pericles, so we could say, appears in the argument as someone who *exemplifies* *phronesis*; he exemplifies what a practically wise person looks like. It is as if Aristotle is saying: if you want to know what practical wisdom is, if you want to know what a practically wise person looks like, look at him, look at her, because they are excellent examples.

If all this makes sense, it suggests three things for the education of teachers, and we could see these as three 'parameters' for our thinking about the future of teacher education.

It first of all means that teacher education is about the *formation of the person*, not, so it should be stressed, as a private individual, but as a professional. This starts, to use the terms I introduced earlier, in the domain of

subjectification. Teacher education is not about the acquisition of knowledge, skills and dispositions per se (qualification) nor about just doing as other teachers do (socialisation) but starts from the formation and transformation of the person, and it is only from here that questions about knowledge, skills and dispositions, about values and traditions, about competence and evidence come in, so to speak – never the other way around. What we are after in the formation of the person is educational wisdom, the ability to make wise educational judgements. Following Aristotle, we can call this a virtue-based approach to teacher education. While we could say that what we are after here is for teacher students to become virtuous professionals, I prefer to play differently with the idea of virtue and would like to suggest that what we should be pursuing in teacher education is a kind of *virtuosity* in making wise educational judgements.

The idea of virtuosity might help to appreciate the other two components of this approach to teacher education, because if we ask how we can develop virtuosity – and here we can think, for example, about how musicians develop virtuosity – we do it through practice, that is, through doing the very thing we are supposed to be doing, and we do it through careful study of the virtuosity of others. And these are precisely the two other 'components' of the approach to teacher education I wish to suggest.

The second component, therefore, is the idea that we can develop our virtuosity for wise educational judgement only by practising judgement, that is, by being engaged in making such judgement in the widest range of educational situations possible. It is not, in other words, that we can become good at judgement by reading books about it; we have to do it, and we have to learn from doing it. Now this may sound like an argument for saying that one can only really learn the art of teaching through doing it. But I do think that there is an important difference between, say, learning on the job (the picking-skills-up-on-the-job-approach the English government seems to be returning to), and what I am suggesting here which we might call judgement-based professional education, or judgement-focused professional education. It is a conception of teacher education where the question of wise educational judgements is constantly foregrounded, where the question what it is that needs to be done is constantly posed and where students are constantly asked to engage with that question in relation to a broad conception of educational purpose and in light of the always unique characteristics of the situations they find themselves in.

The third component, so I wish to suggest, has to do with the role of examples. While on the one hand we can only develop virtuosity through practising judgement ourselves, I think that we can also learn important

things from studying the virtuosity of others, particularly those who we deem to have reached a certain 'level' of virtuosity – or, in Aristotelian terms, a certain 'excellence.'⁸ This is not to be understood as a process of collaborative learning or peer-learning. The whole idea of learning from studying the virtuosity of others is that you learn from those who exemplify the very thing you aspire to, so to speak. The process is, in other words, asymmetrical rather than symmetrical. The study of the virtuosity of other teachers can take many different forms. On the one hand this is something that can be done in the classroom through the observation of the ways in which teachers make embodied and situated wise educational judgements – or at least try to do so. We have to bear in mind, though, that such judgements are not always obvious or visible – also because they partly belong to the domain of what is known as tacit knowledge – so there is also need for conversation, for talking to teachers to find out why they did what they did. This can be done on a small scale – teacher students interviewing teachers about their judgements and their educational virtuosity – but it can also be done on a larger scale, for example through life-history work with experienced teachers, so that we not only get a sense of their virtuosity but perhaps also of the trajectory through which they have developed their educational virtuosity. (We also should bear in mind that, as with musicianship, in order to keep up your virtuosity you need to continue practising it.) And we can also go outside of educational practices and study images of teachers in literature, in film, in popular culture, and the like. We will, of course, encounter both success and failure, and we can of course learn important things about the virtuosity of educational wisdom from both.

These, then, are three reference points or three parameters for thinking about the future of teacher education: a focus on the formation and transformation of the person towards educational wisdom; a focus on teacher education through the practising of educational judgement; and a focus on the study of the educational virtuosity of others. This is what might follow if we approach the task of teacher education in an educational way rather than with reference to a language of learning, and if we take the role of

⁸ An interesting question here is whether we should only focus on those who exemplify educational virtuosity, or whether we can also learn from studying those who do not exemplify this virtuosity. The more general question here is whether we can learn most from good examples or from bad examples. With regard to educational virtuosity I am inclined to argue that it is only when we have developed a sense of what virtuosity looks like, that we can begin to learn from those cases where such virtuosity is absent.

the teacher seriously rather than letting this be replaced by evidence and competence, also in order to capture that wise educational judgement is never the repetition of what was in the past, but is always a creative process that is open towards the future for the very reason that each educational situation, each moment in the practice of education in which judgement is called for, is in some respect radically new and radically unique.

References

- Aristotle (1980). *The Nicomachean ethics*. Oxford: Oxford University Press.
- Biesta, G. J. J. (2004). Against learning. Reclaiming a language for education in an age of learning. *Nordisk Pedagogik*, 23(1), 70-82.
- Biesta, G. J. J. (2006). *Beyond learning. Democratic education for a human future*. Boulder, Co.: Paradigm Publishers.
- Biesta, G. J. J. (2007). Why 'what works' won't work. Evidence-based practice and the democratic deficit of educational research. *Educational Theory*, 57(1), 1-22.
- Biesta, G. J. J. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33-46.
- Biesta, G. J. J. (2010a). *Good education in an age of measurement: Ethics, politics, democracy*. Boulder, Co: Paradigm Publishers.
- Biesta, G. J. J. (2010b). Why 'what works' still won't work. From evidence-based education to value-based education. *Studies in Philosophy and Education*, 29(5), 491-503.
- Biesta, G. J. J. (2010c). Evidenz und Werte in Erziehung und Bildung. Drei weitere Defizite evidenzbasierter Praxis. In H.-U. Otto, A. Polutta & H. Ziegler (Hrsg.), *What Works – Welches Wissen braucht die Soziale Arbeit?* (pp. 99-115). Opladen: Barbara Burdich.
- Biesta, G. J. J. (in press). Receiving the gift of teaching: From 'learning from' to 'being taught by.' *Studies in Philosophy and Education*. DOI: 10.1007/s11217-012-9312-9
- Biesta, G. J. J. & Priestley, M (in press/2013). Capacities and the curriculum. In M. Priestley & G.J.J. Biesta (Eds.), *Reinventing the curriculum. New trends in curriculum policy and practice*. London: Bloomsbury.
- Carr, W. (1987). What is an educational practice? *Journal of Philosophy of Education*, 21(2), 163-175.
- Deakin Crick, R. (2008). Key competencies for education in a European context. *European Educational Research Journal*, 7(3), 311-318.
- Expert/innengruppe Lehrer/innenbildung NEU (2010). *LehrerInnenbildung NEU: Die Zukunft der pädagogischen Berufe*. Vienna: BMUKK/BMWF.

- James, W. (1899). *Talks to teachers on psychology: And to students on some of life's ideals*. New York: Henry Holt and Company.
- Mulder, M., Weigel, T. & Collins, K. (2007). The concept of competence concept in the development of vocational education and training in selected EU member states. A critical analysis. *Journal of Vocational Education and Training*, 59(1), 65-85.
- US Department of Education (2011). *Our future, our teachers: The Obama administration's plan for teacher education reform and improvement*. Washington, DC: US Department of Education.

This article has been subject to blind review.

Education after the 22nd July 2012

Inga Bostad, University of Oslo, Norway
Lars Løvlie, University of Oslo, Norway

The background: 22 July 2011

A lively and healthy democracy is not only built upon education, it must be aware of the difference between an educated person and someone with insight, capable of using knowledge to create a better world: a better world, meaning a world with equality, dignity and freedom, as well as a place for critical reflection where political, religious and moral discussions are encouraged. We have seen through history too many examples of educated citizens who have misused their knowledge, acted against democracy and in the extreme ended up as perpetrators, oppressors and terrorists, who show us that education in itself is not a guarantee against violence, humiliation and abuse.

Key words: Political Education, Utøya Massacre, Insight

In the summer of 2011, shortly after the conference on democracy at the University of Oslo, a terrible and horrific event took place in Oslo and at Utøya. Seventy-seven people, both at the government headquarters in Oslo and at Utøya outside of Oslo, where engaged youth participated in a political camp for social democracy, were brutally killed by a terrorist – the vast majority of them at Utøya. The nation went into collective shock, but instead of meeting the actions with fear and demands for revenge and more police and armed security, it seemed as if the people of Norway gathered around democratic values such as more openness and more solidarity. And shortly after the killings the streets of Oslo were covered with roses, in front of the Lutheran cathedral, Parliament, the government buildings, City Hall and the Royal Palace.

But then the reflection started: How may our society be inclusive and at the same time defend its own values? How can we express even more

clearly the respect for human integrity and our inherent value as humans? How can our society make room for unpopular and extreme opinions, while at the same time be sensitive to the fear of terror? And not least: How may we combine fruitful and sound nationalism with global solidarity? To answer these questions we need to take better account of the aggressive and radical internet discussions on immigration, national identity, violence and culture. We need to confront the uncomfortable ideas that exist in our society and in this confrontation refine our views on tolerance and intolerance.

The events in Oslo and at Utøya in the summer of 2011 add an important dimension to the need for reimagining a democratic society: The terrorist's own ideology showed distaste for weakness and a romanticising of violence, combined with a desire to be a uniformed hero. The terrorist was also a product of our society and his ideas have their roots in the middle of our ordinary lives. How do we confront ideologies of this type, how do we build up resistance towards such inhumane actions, and how do we create a public culture of debate and actions that appeal to a diverse and modern society?

Education is a part of the answer, but we cannot "teach away" the terrorists. In this article we will argue for an education that seeks to foster critical, reflective and moral individuals who are first and foremost morally capable of creating moral disturbance, confronted with the current global dilemmas, with the classical questions in science and society, and who have internalised the academic virtues of being analytical, critical and ethical – arguing with precision, care and sufficient knowledge. Such dramatic experiences as those of summer 2011 in Oslo and Utøya may open up two windows into academic society: first, the liberal education that we need from the historical and multidisciplinary knowledge of the universities for any unknown event in the future; and second, the awareness of what is lacking in today's democracy. The core task of an open society is to develop and develop again and again, for every new generation, a public dialogue – a dialogue broad enough to face uncomfortable dilemmas.

Reimagining democratic societies: deliberative democracy

Political education often begins with personal experiences of infringement, injustice or lack of respect for oneself and others, by being drawn into political movements and organisations, or by dramatic political events. It may also come down to the more commonplace influence of a good friend, an inspirational teacher or an absorbing book. In any case, it seems to begin

with what we call *in media res* – in the middle of things, by time and by place: the assassination of President John F. Kennedy in Dallas in 1963, the attack on the World Trade Center in 2001, and now in Oslo and at Utøya on 22 July 2011. A person does not become politically-minded out of the blue, but through their upbringing, which makes us part of a society of political institutions. Even when we are children, the past is engraved in our minds in the form of attitudes, customs and concepts. But it is the incident which ignites our perception of history, making a difference and thereby becoming significant. Utøya was one of these instances.

We will let the incident of 22 July lead us into the subject: education in a democracy. The bombing of the Government block and the massacre on Utøya increased the significance of what is known as deliberative democracy, based on the concept of a political debate in which everyone, in principle, has a right to their opinion, and in which people follow common rules of objectivity. In terms of methodology, the deliberative is based on a dogma of objectivity¹, while it is clear that a political education is more than a mere skill and an instrument. It is the everyday world which makes the dogma of objectivity and political debate possible, and it is tradition which provides cultural resources. If we are to talk of democracy in the Western sense, then we require concepts and values such as freedom of expression, equality, solidarity and tolerance.

Moreover, we relate to such values in a rhetorical field in which irony, paradoxes and deconstruction all form part of political education. But let us begin at the heart of the reality of 22 July. The attacks were carried out by an ethnic 32 year old Norwegian, born and brought up in Oslo, who, to everyone's astonishment, was operating alone. We cannot begin to explain Anders Behring Breivik's actions. He made the impossible possible, but we cannot prepare for the impossible. We can improve the upbringing provided by schools, but we cannot "teach away" the terrorists. When psychological diagnoses result in the increasing isolation and stricter treatment of potential offenders, when measures to safeguard against the impossible move us further towards a surveillance society, when the media fuel people's fear and loathing, and when the reaction of schools is to indoctrinate, then we are moving towards the very totalitarian society that Breivik wanted. Breivik is a neo-fascist ideologue, urging us to fight against what

¹ The translation from Norwegian "saklighet" to "dogma of objectivity" or "objectivity" is somewhat problematic because "objectivity" could also mean that something could be tested independently of the individual who tests it, but still we have chosen to use this translation.

he perceives as a back-door Islamification of Europe. That ideology is based on the premise that the Muslims' invasion is supported by the governing political elite and the public media and that the political youth organisations of Norway are continuing this tradition. On the day he carried out the attacks, Breivik published a 1500 page political manifesto, cut and pasted from various sources and supplemented by his own comments. It is worth mentioning three features in this context, features which lead to the question of how we envisage education in a deliberative democracy. The first feature is ideology and is tied up with viewpoints which are as common on populist immigrant-sceptic internet forums as on Europe's extreme right wing. Those who envisage what they call Eurabia do not necessarily lack political knowledge. The flaw in their argument lies in the facts, in a logic that concludes with the absurd, in a judgement that is warped. The second is immunisation, which is on the emotional level and can act as a motivator towards extreme actions. This is about the "big conspiracy", namely the alleged Muslim plot to take over political power in the West, an intrigue in which the Western elite is a willing participant.

What are the typical features of this kind of conspiracy theory? Naturally, it is immune to criticism. Counterarguments against the theory are by definition part of the big conspiracy. They only reinforce the belief that the other party is embracing the whole pack of lies. This paranoia and lack of trust preclude any actual objective discussion. The third feature is self-imposed isolation and denial of reality – withdrawal from interactions with family, schoolmates, friends and colleagues. (We do not in this essay discuss the terrorists psychological and mental illness, whether his actions also relate to, and may be explained by, his mental disorders, something which does not affect our more general arguments on political actions). This creates a social and mental void which limits any recognition of others and means that family authorities can have only a limited influence. What insights do we gain from this? Firstly, that knowledge is not enough. It must be disciplined by a communicative, discursive rationality and controlled by reasonable procedures. Secondly, that faith-based immunisation prohibits the discursive public that Kant in his day envisaged, where people have the courage to express themselves based on personal autonomy and a healthy examination of reality. Thirdly, that self-imposed isolation leads to real isolation and lack of judgement; for judgement is another word for social common sense, and we develop this by interacting with other people. These conclusions can be summarised in the concept of a deliberative or discursive democracy.

Some history

The word “to deliberate” roughly means to evaluate, discuss and reflect, but has no immediate function in everyday language. The word “discursive” can be substituted for the word “deliberative” and we may differentiate between three different types of discussion. The first type is when we verify statements of fact, to find out whether they are true or false; the second type is when we make normative statements, i.e. right or wrong; the third is about values, in other words the issues with which people identify, that they esteem and want to preserve. Empirical and normative statements in speech, writing or images are in principle free, public and available to all. Verification is a form of criticism which does not reject other people’s statements, but examines them in a public debate which must adhere closely to facts. The same premise applies to the question as to how we should act towards other people in a multicultural society which is based on the principle of complying with what is right and what is fair. However, discussions regarding values cannot be approached in the same way as letting the cows out in spring, where points of view can be allowed to roam in different directions until they run out of energy, and where people can choose to live by certain criteria, for example by what is fair play at work, good music in a concert, or suitable content for the school curriculum. A complete concept of democratic education must therefore be extremely extensive. The debate can then range from the formal research seminar to newspaper articles against discrimination and even to the question of what is a nation. It can take place in all its variations within a common horizon, using everyday language as a medium. There is nothing to prevent the classic trio of that which is true, right and noble from forming the basis of political education.

Historically, deliberation or discourse goes back to the European Enlightenment and can be found in Immanuel Kant’s concept of “publicity”, in Edmund Burke’s idea of parliament as a “deliberative assembly” and later in John Stuart Mill’s proposal for a “rule through discussion” (Elster, 1999, p. 1ff) Discussion in our sense includes the constitutional state and civilian society, and ranges from Stortinget (the Norwegian Parliament) to voluntary organisations such as Save the Children. We can differentiate between three different practices in our democracy: representative, participatory and discursive practices, or, if you prefer, choice, negotiation and debate. We achieve the first on Election Day, the second during salary negotiations, and the third by justifying moral and political statements. John Dewey’s republican ideas, in books such as *The Public and Its Problems* from 1927, of the state as a “political public” created by “common activities” and “articu-

lated” by selected representatives (Dewey, 1927, p. 67), covers these areas. His proposal of education based on general logic as a means of solving problems, a “logic of inquiry”, has similarities to Jürgen Habermas’ idea of justifying a linguistic philosophical profile by the use of arguments. On a more general note, the Second World War led to a general requirement for Scandinavian education to offer a more political upbringing and knowledge, to such an extent that it is possible for us talk, with Theodore Adorno, about education after Auschwitz (see Adorno 1971).

Discourse and education

Education is not achieved solely by setting requirements for knowledge and skills. Having a reading list and ensuring that skills are learned is, of course, essential, but introducing a regulation for education in the form of the European qualification framework – a key element of the Bologna Process – creates a quasi-legal governmental regime with formal obligations and sanctions. The framework itself is not open to debate. The problem may be illustrated by the most recent upper-secondary school curriculum in Norway. While it was being developed in 2005 and 2006, several drafts of the Norwegian plan were published on the internet. One of them proposed that the issue of the canon, which is the basis for the prescribed reading list, should be included in the curriculum, thereby making it an issue not only of content but also of scope. The proposal was removed in the next draft and the curriculum thereby lost its self-critical function, which is to address any differences or rough edges in its own concept and system. We do not know of any reason why the proposal vanished, but we have two hypotheses. The first is the view that this “metalogue”, to use Gregory Bateson’s (1972) term, could create conflict for the teacher or be too difficult for the students. The second is that as long as the students are acquiring knowledge and skills, the teachers are doing their job. Schools should prepare students to criticise, but do not need to criticise themselves. Both are problematic. Traditionalists view education as an initiation into the ways of the bourgeois middle classes – a way of getting the barbarians inside the walls of civilisation, as the British educationalist R. S. Peters once put it (Peters, 1972, p. 107). But children are not primitive beings living in the wilderness; they do not live as barbarians before they can talk or heathens before they are christened, but from birth – and even before – they are actually living among us adults inside the four walls of our houses. Over a period of time, education is there to cultivate attitudes and mentalities that promote independence and

criticism. It imparts political insights that make pupils and students aware of simple and more subtle power mechanisms in society and thereby help to increase their political and moral understanding and judgement. This is also a key element in Wittgenstein's philosophy, where meaning is something already established and the upbringing a process of learning how to apply the rules of meaning and sense, and to learn to speak is not to learn by pointing at things and connecting them with names, but by using words in contexts that already have meanings: "light dawns gradually upon the whole"².

The line between initiation and social criticism is not easy to define. The American philosopher Richard Rorty tries to solve the conflict in one fell swoop, and he does this by locating the conflict in various educational phases. In his article "Education as Socialization and as Individualization", originally published in 1989, he suggests that up until the age of 18 or 19, education for most people should be about socialisation, about instilling traditional values: "...getting the student to take over the moral and political common sense of the society as it is" (Rorty, 1999, p. 116). After students have left school and gone on to college and university, it is time for their "rebellion" against indoctrination and for them to realise themselves as individuals. This view seems to hit two stumbling blocks: one on the psychological and the other on the logical level. Firstly, young people are capable of social criticism based on their own experiences and on what they learn at home, at school and from their friends. Since socialisation goes hand in hand with individualisation, the solution of postponing children's criticism does not seem to be a particularly good idea. Furthermore, children have, in many ways, more inquiring minds than adults. Let us move on to the stumbling block of logic. It seems no less impossible to believe that the transition from indoctrination to criticism comes as a surprise on one's eighteenth birthday than it is to believe that knowledge is transformed into action as if by magic. Students are developing their critical repertoire at the same time as they are learning facts, acquiring good habits and using the ability to evaluate what is part of a critical debate.

These observations require us – parents, teachers and citizens – to take responsibility for an early, multidimensional schooling in critical thinking. This schooling takes place in the form of indirect encounters with democratic ideals, by demanding respect for children's boundaries, and encouraging them to speak rather than strike, to accept rather than bully, and to

² Wittgenstein (1953) *Philosophical Investigations*

include rather than isolate. Criticism feeds on diluted authority, for example allowing teachers the freedom to design their own methods and curricula which free teachers and pupils from rules and regulations that create lifeless routines and absolve the parties of everyday responsibility for themselves and each other. Moreover, when students are valued using double descriptions: as self-centred yet social, reckless yet cautious, or unreliable yet responsible, teachers may find that it is a hard balancing act to choose between whether to demonstrate a point of view or leave it open and whether to stand by their authority or accept their fallibility. Responsibility for one's own opinions, the *Mündigkeit* (authority but also coming of age) mentioned by Kant cannot be put on hold, but should be cultivated over time through usage and experiences shared by teachers and pupils. This is highly relevant in today's facebook-culture of "likes" and "dislike" – an uttering that needs no argument or reason whatsoever. The ideal of taking responsibility for one's own opinions is an educational view and the basis for a broad discussion of a discursive democracy as an educational project.

The need for rationality

It is no new discovery that democracy is a vulnerable institution, nor that in the long run, sound and well-based arguments and the search for objectivity are a good and preferable safeguard against fear, discrimination and hatred. Kant's Enlightenment Age contribution was his concept of what we could term a regime of rational discussion. Regimes like this set strict boundaries for a reasonable debate. One example is Arne Næss' principles for a fair debate in preliminary tests in philosophy, which later became the *Examen Philosophicum* (a one semester introduction to philosophy and logic previously required of all university students in Norway). In the 1960s, in his little book *En del elementære logiske emner* (Næss, 1941/1982) he defined the field of objectivity as avoiding irrelevance, ambiguity and irony. Now, of course, irony does not have to be subjective. It can be a particular way of relating to the world, as we find in Richard Rorty's irony, in which the ironist appreciates what is contingent or random in his own convictions and in which this doubt is tied up with the hope that it may be possible to reduce the cruelty of the world. Similarly, ambiguity does not mean several ways out of the fox's den, so to speak; rather it refers to the complexity of interpretation and rhetoric.

We have outlined a concept of objective discussion that ranges from the requirement for unambiguous, consistent thinking and its relatively strict

rules on arguments, to discussion by topic, which has room for interpretation, irony and paradoxes. It is one thing to verify empirical statements, but another to justify normative selections and a third to interpret a text and lead value discussions. But then we are also talking about maintaining the scope of the practice that we know as education. In the introduction, we mentioned that knowledge is not enough, but that empathy (having personal experience of something as unjust, unfair and opposing personal or collective values), political sense and the ability to tackle an objective discussion are also needed. When knowledge is on the table, it should be verified and justified in an argument involving two or more people in a conversation or discourse. In a dialogue there are always two or more participants who need to listen to each other, argue and justify the validity of their ideas and theories – and they need to engage in each other’s positions. There is always a counterargument, always another way of looking at things and always another human being with rights, convictions and dreams.

Educationalists are prone to perceive language as a means of communication, something that we use to make ourselves understood and influence others. This is interrelated with the current focus on knowledge and skills, in which language skills – you must be able to read and write – become part of a person’s competence, enabling them to succeed in a professional environment. Traditional rhetoric may support this view. Quintilian’s *Institutio Oratoria* was used by the Roman upper classes as an educational methodology. In addition, languages exist in the plural form, and having language skills could now mean mastering e.g. Norwegian, English and French. But language also exists in the singular form, language as a background and medium, the cement of society. According to what is known as the linguistic figure of speech, society is not based on man’s awareness or on society’s institutions – its basis is not Kant’s “I think” or Hegel’s concept of *Sittlichkeit* or ethical life – it is rather everyday language. Here, we will identify and examine some linguistic uses of “reason”, and attempt to reconstruct them. Your and my uses of reason pass from being pure thinking to becoming public and communicative, put on social display and realised in Richard Rorty’s “conversation of mankind”. We can make this conversation or dialogue more specific, using the grammar encountered by children in their first years at school. In the expression “I think...”, I use the first person to address another person from within an originally physical and musical relationship between child and carer, but now based on a generalised expectation that the other person will answer and thereby take responsibility for the social relationship.

The educationalist and linguist Wilhelm von Humboldt had faith in the individual and claimed that *Bildung* is a *Selbstbildung*, an education of the person or self. He assumed firstly that language is not simply a means to make oneself understood (*Verständigungsmittel*), but also an expression of the individual's "soul and perception of the world (*Weltansicht*)" (Humboldt 1963:135). He then stated that we as people develop in the living environment in which we participate, but that this participation has its motive in the fundamental social relationship between the "I" and the "you". We now see in this relationship "the deeper and nobler feelings, which in friendship and love and in every spiritual fellowship bind the two together in the deepest sincerity" (*idem*: 140). Individual and society are not pitted against each other here; the differences between the two rest on a linguistic fellowship (a fellowship that may consist of words or body language). The purpose of upbringing is an independent self that cannot be considered to be isolated from mankind as such (Humboldt 1827/1963, p. 135). You and I are abbreviations of the self that is already interacting in a world that is maintained and conveyed by language. The grammatical conjugations of "I am", "you are", "it is" actually direct us towards the relationship between self-awareness, the other person and the rest of the world.

Reflective education

Reimagining democratic societies is about self-reflection and self-scrutiny. We have to look at our own history and our own institutions critically: What kinds of values are present in the curricula of schools and universities, how do we express the core values at the different schoolyards, campuses and in the seminars? How seriously do we debate with radical opponents, how open to all political and ideological views is the society of schools and universities and how do we as teachers act as role models when it comes to being inclusive and caring – while at the same time encouraging intellectual inquiry?

From one perspective education is formal, that is, it is something you have or do not have, in contrast to the process of understanding and reflecting upon what you have read and heard and said; an understanding of knowledge on behalf of which you act. From another perspective education is static and has a given duration, while our use (and misuse) of this education is a never-ending process of making knowledge meaningful – a process of maturation that takes place in each individual (Bostad, 2009 and 2010b).

One line of western history goes back to classical philosophy, not least to Plato's Academy, where we see a notion of general education or *Bildung* emerging related to the concepts of virtue or capability, and that mastering life is a matter of refining one's personality or character (Bostad, 2012)³. Such a notion is, for instance, seen in Aung San Suu Kyi's political rhetoric of personal virtues of "kindness and uprightness"⁴. In Plato's ideal school, general education does not occur through passive acquisition of facts and skills, be it science, law or policy, but rather through a unique matter of self-knowledge. The Platonic ideal of education lifts the rational, free man up as an ideal citizen, and our point in this essay is not to complement this with dependence theory, but rather show how concepts of general education may be fruitful in our current context in the way that it is about being *deeply convinced* of a claim, a reason or an argument, as opposed to being *persuaded*. A person who is *persuaded* has accepted facts or skills without reflecting on them, perhaps repeated something more or less automatically, whereas a person who is *deeply convinced* understands why and has a consid-

³ Official Norwegian Report NOU 2007:6 *Objectives for the Future. Objectives for Kindergartens and Education and Training. Report from the committee appointed by Royal Decree on 2 June 2006*. Presented to the Ministry of Education and Research on 8 June 2007. Chair: Inga Bostad. The mandate for the Bostadcommittee to formulate new objectives for kindergarden and primary and secondary schools in 2008 was: What should the purpose of education be? What values should be upheld and promoted in modern schools, and what kind of views of learning, maturation and general education should teaching be based on? Are there any common values that the whole of society agrees on? It was a democratic process where representatives from different religious, political, ideological and social groups were present. The discussions in the committee showed that there was little support for attempts to be value-neutral, which was regarded as being synonymous with indifference. Cultural heritage had to be regarded as dynamic – that it shapes us and we shape it, and that the next generation's cultural heritage will consist of the things we have been involved in giving content to and conveying – elements we have picked out and valued. Last, but not least, cultural heritage is, if not cacophonic, then at the very least extremely polyphonic. The committee ended up formulating some concrete core values that were to provide a direction for schools and express common consensus, a process that also allowed the individual members of society to justify the values in their own way – on the basis of their own religion and beliefs. It was essential that schools should be based on respect for human dignity, intellectual freedom, charity, equality and solidarity, at the same time the principles of religious freedom and non-discrimination were included. Religious and philosophical freedom is protected by several human rights conventions that also ensure the right to teaching and education without preaching and indoctrination.

⁴ As she put it in her acceptance speech at the Nobel Peace Prize ceremony in Oslo in June 2012.

ered, personal relationship to the knowledge they have acquired. In other words, the teacher convinces the student, not only by showing the students the pros and cons, and the arguments behind the arguments as well as the counterarguments – but also by being in the unknown, the open arena⁵, with the students. This implies a fundamental shift in the way of looking at the relationship of teacher and student – it is not purely a “student-centred” way of learning, it is an “inquiry-centred” approach to academic knowledge where the common aim for both teacher and student is to succeed with serious inquiry. The teacher and the students are “in it together”, trying to go deeper into an unsolved problem, analysing a concept together, looking at it from shifting perspectives. It is an essential democratic element in the dialogue that shifting perspectives are encouraged and lifted up as an ideal.

The philosophical dialogue may be structured in different ways, due to the curriculum, the age and cultural background of the students, but the common method follows a specific pattern intended to lead the parties in the dialogue to greater clarity and understanding of general issues related to human life, primarily by *uncovering* problems, but also by searching for good, tenable arguments, viewpoints and perspectives. This inquiring method is open and invites a range of creative and impulsive hypotheses. Ideally, the structure of the dialogue has no room for ready-made solutions or predefined answers; ultimately it rests on the possibility that individuals can draw conclusions that may well be changed in the next round of discussion.

In practice, this does not undermine the position of the privileged teacher and her authority. To lead this type of academic dialogue presupposes authority and knowledge on both the subject and the method of inquiry where the teacher/conversation leader encourages new quests (Bostad 2006, chapter 6) disturbing the students, asking provocative questions and making them think in new terms. But in addition to the platonic ideal of a search for truth, a modern university needs to continuously be aware of, and reflect upon, the environment that determines any learning situation, that the students are persons with a gender, a personal history, a religion or a personal conviction, at a specific place and time.

In other words; the *praxis* of philosophical inquiry is a “happening”, as Hannah Arendt puts it (Arendt, 2004, p. 297): something unpredictable, uncontrolled and unexpected, which challenges every theory and method

⁵ What Bostad has referred to in other articles as (“forvirringens hav”), “the ocean of confusion”.

of pedagogy. To ask and make inquiries in a dialogue is to place the question itself out into the open; in contrast to repeating what is a common truth, to ask open questions makes the topic itself and its different possibilities “floating”, as Gadamer puts it (Gadamer, 2004, p. 348-349) and reveals the distinction between understanding and reflecting or thinking, which also implies the process or understanding that something will never be understood.

The tradition of “mindful” pedagogy of encouraging and accepting thoughts and emotions which are revealed in a learning situation (Hansen, 2008), is to be distinguished from philosophical *praxis* of critical, creative and humorous inquiry of knowledge, wisdom, beauty and meaning. This *praxis* is not in the same manner as the traditions of mindful pedagogy concerned with care and upbringing, according to the Danish philosopher Finn Torbjørn Hansen – it is more rebellious and unpredictable. Even if Hansen’s concept of “being in the open” is a fruitful perspective on the process of understanding and grasping knowledge as something different from thinking (which often implies being silent and in wonder), a framework of care and dignity is missing in his philosophy. Participating in an academic dialogue requires an environment of academic values such as respect, equality, autonomy, sincerity and a sense of unity in diversity. It is naïve to believe that education is free, that it sprouts and grows in every individual as long as we ensure that reflection is open and inquisitive (Bostad, 2009). The social reproduction of education is one of the major challenges to education today, as Hilligje van’t Land suggests⁶, and furthermore the power relations that exist in all forms of learning require an understanding of existence and use of the cultural capital in society for instrumental perspectives on learning pressure and learning outcomes.

The arguments

We now return to Næss’ dogma of objectivity, since it centres on the formal requirements for conversation as a means of argument, and it is relevant to our discussion, for three reasons. The first is that Breivik’s manifesto has confirmed the fatal labyrinths of the madcap. The second is that discussions since 22 July have been related to truth and justification. The third is that

⁶ In a lecture held at University of Oslo, June 2011, at the conference “Reimagining democratic society”.

the incidents confirm the need for political education to contain methods that objectively legitimise political statements and programmes.

Some people are simply not concerned with facts. One example is the Progress Party politician Carl I. Hagen, who almost immediately after the incident stated in an interview in the major Norwegian newspaper *Aftenposten* that all Muslims might not be terrorists, but that “almost all terrorists are Muslims”. This caused a stir, as it seemed to be a repetition of something he had said as far back as 2005, something which was demonstrably wrong. Svein Abrahamsen, at <http://liberal.no/2011/08/faktasjekk-er-nes-ten-alle-terrorister-muslimer/>, immediately went through Europol statistics, and found that in the period between 2006 and 2010, extreme Islamists represented 0.4 per cent of terrorist activities in Europe., while French and Spanish separatists represented almost 85 per cent.

The FBI statistics for the period between 1980 and 2005 showed that extreme Islamists represented nine per cent of such incidents. Hagen’s view was refuted by various media, including *Aftenposten*, but Hagen remained immovable, claiming that he had been thinking about global figures when he made his statement. However, Abrahamsen has found that during the period between 2006 and 2010, less than 30 per cent of attacks worldwide were carried out by extreme Islamists, and that includes attacks in Iraq and Afghanistan. (<http://liberal.no/sveinabrahamsen/>). <http://liberal.no/sveinabrahamsen/>). Abrahamsen shows how in political debate arguments should be based on facts, documentation and the means to publicly disprove a distorted reality. Naturally, his documents may also be debatable, as he has not taken into consideration those instances where the authorities averted Islamic terrorist attacks. In any case, knowledge is and always has been the first commandment of education, and refutation based on facts is its first servant. Statements about Muslim terrorism are closely related to statements about the alleged back-door Islamification of Norway. The first kind of statements can be refuted relatively easily by referring to facts. But the second kind becomes part of a wider discussion, about a conflict of civilisations, about Muslims speaking with forked tongues, and therefore about conspiracy. It makes a difference. It is one thing to check facts against sources, but quite another to discuss values against culture. The latter requires broad interpretations and historic rationalisations.

The background culture, a mutual horizon of ideas, must be taken into consideration. It is not possible to exchange views about what is reasonable and fair without some kind of mutual understanding of national and local traditions, including customs, rituals and interpretations, which are not necessarily part of the discussion. This implicit lifeworld has already given

us customs, metaphors and concepts which make individual interpretations possible. Shabana Rehman is a Norwegian writer of immigrant (Pakistani) origin. Her consistent critique of the oppression of women in the Norwegian-Pakistani community was based on the idea of the autonomy of the individual and the universal right to think out loud in public, on behalf of oneself and others – a living assertion of Kant’s principle of thinking. These days, many people who are involved in the immigration debate expose a similar degree of oppression in Norwegian culture, for example of discrimination in the workplace. Since 22 July, deeply rooted prejudices have started to appear in the political arena as ideologies and rhetorical manipulation – and people have become more aware of this. Extreme right-wing bloggers with their back-to-front perspective have more than reminded us that politics is language and that talking may lead to action. The rules of the argument stand out as a civilising factor in a multicultural society that depends on the agreement of the people – and if necessary, on their right to disagree.

Which criteria are necessary for objectivity? Here are a few random examples: Play fair, allow your view to be open to criticism, admit that your assertion has been repudiated before you put forward another one that backs up your main point (“I didn’t really mean Europe, I meant global terrorism”), do not generalise one case to all (“Some immigrants are villains, therefore all immigration is bad for Norway”) and take the consequences of losing the argument. But as von Humboldt already implied, the linguistic figure of speech is to the detriment of Næss’ doctrine of objectivity, at any rate as a pure method. A method is a tool that needs to be justified by something other than itself; it needs more than a decision from the education authorities and a proposal in the curriculum. The universal validity of politics is not good for local traditions, based on the idea that personal autonomy easily goes hand in hand with community responsibility. In objective discussion, in principle everyone can join in, even if in reality the discussion is limited by culture, gender, class, education and in some cases just bad luck. It is these limitations which make people write off arguing as an attempt to cast people in the same mould, created by an elite and an expression of the West’s intellectual lust for power. But then we have people like Shabana Rehman, who demands individual independence for all, and Abid Qayyum Raja, who managed to get hot-headed young people together into a political discussion at Oslo’s House of Literature after demonstrations against the Israeli Embassy in 2009, thereby introducing them to discussion as an important part of democratic political practice.

We have suggested that political education must be based on knowledge and an objective treatment of the facts, based on rules that we may summa-

rise in a dogma of objectivity. What is needed, then, is the knowledge and skills to enable us to lead a conversation according to mutually accepted rules; in other words, a method or system to focus and guide us through the process of solving problems. Examples from political parties show that the requirement for objectivity is often weakly represented in election campaigns, for example, and that the issue of what is right and what is fair loses out to political expedience. In fairness, the politicians did unite during the autumn 2011 local elections and agree to be “nice”, without in any way minimising the differences between the parties; perhaps an admission that democracy must be protected and that objectivity must come before expedience. Surprisingly enough then, it turns out that the events of 22 July have weighed in with more stringent demands on political rhetoric – we will see how long these last. But political education inside and outside the arena of party politics should be examined against a content that is detrimental to knowledge and skills. What we would call *the pragmatic-linguistic figure of speech* introduces something new here, namely an analysis of what we must expect when we enter into an objective discussion. This is about clarifying what is implicit in our speech acts, without falling back on subjective experiences and blind faith in our own opinions or in research institutions and communications experts, but on the bonds of everyday language.

Why examine these bonds, which are not the bonds of law or regulation? It is primarily to see how a practical fellowship, in this case a fellowship of language, can be described as education. Within certain boundaries, we can defy the law’s rules and replace them with others, and that is what happens when people protest against laws that give to the rich and take away from the poor. We can also forget some skills and replace them with other, more adequate ones, and this has happened with the introduction of the computer. But the general contention now is that certain prerequisites need to be present if we are to be able to talk about a moral discussion at all. Without these prerequisites, we end in absurdity. To put it differently, some prerequisites can be regarded as norms which are constitutive or essential prerequisites of conversation between people. These can be identified using a philosophical reconstruction reminiscent of a psychoanalyst’s work on memory, except that here it is the use of language in a social context that is being examined.

Identifying the obvious

Jürgen Habermas suggests the type of reconstruction of things that already have to be in motion when we are involved in a discussion of right and wrong. We must presume:

- a) that the other person's understanding of the words we are using is roughly the same; in other words, that we share an interpretation horizon and an unambiguous vocabulary,
- b) that the other person is of sound mind, that is that they are an independent or autonomous person, someone who can speak for themselves, and
- c) that they are truthful and not speaking against their better judgement.

Yet these norms are obviously idealisations, since we cannot assume that these prerequisites will actually have been met in every discussion. On the contrary, reconstructing them serves to identify – in the manner of Heidegger, as it were – the prerequisites for a serious political discussion. And it is here that we find the suggestion for a political education within the framework of our democracy: the fact that education not only implies norms but also explicitly relates to them, and still practises a form of self-criticism. In a way, this then confirms what we implied at the start: that a given culture has already formed its students and that eager educational agents can also say that they are making the understood understandable. Education is not just a content that we should acquire, a method we should use or a result that we should achieve, but a reflection of something that we already have to understand if we are to participate in an informed political life.

The Norwegian philosopher Gunnar Skirbekk has pointed out that we should reject the classic German *Bildung* idea of the perfection of man, and admit instead that we are under a certain obligation to realise discursive norms, in the certainty that we are fallible. Of personal autonomy in the Kantian sense of thinking for oneself, he says that it is “a question of graduality, not of perfection” (Skirbekk, 2009, p. 98) Participants in serious discussions must recognise their mutual fallibility and thereby accept “a gradual autonomy which needs improvement”. The requirement of arguing without manipulating then goes together with the mutual need to reinforce personal autonomy. The idea of personal autonomy is constitutive in the sense that without the prerequisite in point b) above, we may well have a conversation of one kind or another, but no discussion. Since the idea of

autonomy prescribes a task that can never be completely achieved because of human fallibility, it can only be possible to live by an ideal that is by definition beyond the reach of man, and which must have a nature of expectation or hope – that is, a utopia.

If someone wants to try to achieve this ideal politically, and turn the utopia into reality, this brings two known potential evils into play. The lesser is paternalism, or knowing it all, which allows an authority such as a leader or member of the elite to define your goal for you, and determine the course you must take. The greater evil is achieving the perfect discursive democracy, since that ends in a terror of opinion and the totalitarian state. To nurture a hope is to think ironically in Rorty's sense of the word: a thinking which is sceptical of its own thoughts. However, the counter-factual is not about ignoring facts or putting reality on hold, but about avoiding a concretism which underestimates the place of idealisation in everyday life. We do not need to decide to act according to the ideal prerequisites that are in operation in the conversations we have with each other. Idealisation is already in circulation in language, in the form of approaches and invitations to join a sensible political way of life. These are practical themes in the democratic metabolism. They also act as sentinels, providing us with criteria with which to identify breaches of the objectivity norms and thereby enabling us to correct an unsuccessful or dysfunctional communication. What actually permits us to criticise the popular rhetoric is linguistic reflection, which also tells us what we must in fact expect if we are to be able to say that something is deliberation and not preaching or propaganda – or the rhetoric of power, where the individual is set aside.

Skirbekk introduces the thought of man's biophysical existence, with all its vulnerability and inadequacy (Skirbekk, 2009, p. 169). He advocates a concept of personal autonomy not as fact and perfection, but as an ongoing draft or project that is controlled by the thoughts of "more or less" and "little by little", and of the transition from something that is poor to something that is better. What is important for this educational project is the idea of improving people's independence by protecting them against personal infringements – he allows this thinking to fall under the banner of "meliorism". This is not about lofty ideals or strong formalisations, but about idealisations in a pragmatic and existential setting.

Rehman's requirement that we should be treated as independent, authoritative individuals and Raja's invitation to talk instead of climb the barricades introduce implicit validity requirements and include everyone who allows themselves to be persuaded by those values which we hold in esteem in a democratic society. But the intention of achieving the political

ideal and turning utopia into reality brings two potential evils into play. The lesser is paternalism, or knowing it all, which allows figures of authority such as politicians, bureaucrats, head teachers or teachers to tell you what is best for you. The greater evil is achieving the perfect discursive democracy, since that ends in the same totalitarian state that Fascists dream of. To think in idealisations is to think counter-factually, yet that does not mean ignoring facts or putting reality on hold, it is rather about avoiding a concretism which ignores the place of idealisation in everyday life. Habermas puts it like this: “The point is that if we want to enter an argument, we have to take the argument’s prerequisites as a *fact*, even if they have an ideal content that we can only get close to in reality” (Habermas, 1993, p. 164). . In other words, they exist as an “as if” in objective discussions and this hypothesis or expectation appears as a practical requirement.

There is an obvious example. The Norwegian Education Act’s first paragraph, which describes the objectives of Norwegian schooling, contains strong ideals of intellectual freedom, equality and solidarity⁷. If we take these values at their word, and wish to achieve them in a specific set of quality-assured qualifications, we encounter a new paradox: the paragraph outlining the objectives cannot be turned into reality in the form of specific learning objectives unless it abolishes itself. The reason for this is that values are not the same thing as knowledge, skills or individual expertise, but idealisations woven into language and existence. This paradox is also the paradox of education. From 2013, the national qualifications framework will apply to all higher educational institutions. The idea of a common qualifications framework is to try to standardise education so that it will be possible to compare achievements measured on an individual level with the results from other countries. But the better we are able to define education through learning outcomes and institutional rankings, the less we tend to be able to reflect on the type of institutional practice.

In a way, the argument is an invisible institution since it has no address, no offices and no budget. It contains a formalisation of everyday discussions and is a mode or practice that we can elect to use when political opinions, values and objectives come into conflict, requiring further justi-

⁷ “Even if we see a modification of the egalitarianism of the Norwegian people in an ongoing research project at ESOP (...), University of Oslo, where groups of people from different places in the world were asked to share an amount of resources, and the conclusions were that the Norwegian group was not more egalitarian than for instance the AfricanW (speech by Kalle Moene, Forskningstorget [the Research Agora], September 2011, University of Oslo)

fiction. Discourse can generally apply to the boundaries of freedom of expression, the market, or state intervention in the private sphere, but applies more specifically when university researchers protest that the results of their contract research is falsely presented or teachers protest against the increasing amount of testing in schools.

Let us summarise some of the potential educational benefits of a deliberative practice. Students are trained to develop inquiring minds, to see statements as hypotheses that must be tried in discussion and to see the results of an argument as provisional and open to further discussion. To argue requires the skill of putting forward a problem, grasping significant aspects, bringing in different contexts, formulating a view, working towards potential agreement, respecting the rights of others to disagree and accepting the better argument, even if it means giving up a cherished conviction. Conflict is not necessarily an evil. At best, a discussion of the objectives and meaning of schooling will not only improve people's ability to justify their views, but can also create the trust that is engendered when people recognise each other as responsible citizens and honest debaters. These are some of the qualities that are included in what Habermas calls the democratic education of opinions and will. The argument has its limits, which we have touched upon while discussing this subject. But it permits judgement, thinking for ourselves, and it disciplines thinking without making its results all-encompassing. Democracy is an unfinished project.

Democracy and the access to knowledge

Democracy in the broad interpretation as participation and involvement on all levels, in all discussions, especially when it comes to the minorities, disabled persons and so on, fits neatly into the Norwegian version of democracy. As in the other Nordic countries, our current economic and social model is based on democratic principles such as openness and transparency, equality, egalitarian and extensive welfare benefits, and political organization based on the right of participation. As Nina Witoszek says in her book "Norske naturmytologier" (Witoszek, 1998), the special Scandinavian form of social democracy is a tradition based on values stemming from the Christian period of Norwegian history, starting around AD 1000. It is a form of social democracy that has promoted egalitarian ideas, placed a focus on the weak and underprivileged while at the same time promoting a pragmatic worldview. Today, we see a political tension in the national policies for education between the right-wing parties' effort to develop tools for

the best students and the leftist parties holding on to the values of reducing social inequalities.

Social reproduction is an ongoing challenge in all education, primarily by focusing on the relationship between good grades and mastering of the curriculum on the one hand and privileged background on the other. This implies that the children from less privileged backgrounds are not able to develop their potential. Or in other words: there is nothing wrong in following up the “best” pupils or the best students with high demands, as long as there are equal opportunities for all to get there. Education is regarded as the most effective institution to reduce social inequalities in society, but there is no clear and simple answer to the question of how to reimagine democratic societies; the formal conditions are free access to education for all, no or low school fees, and a strategic policy of public education, but the political-philosophical goal is to develop attitudes and ways of thinking which promote independence and critical abilities.

Knowledge and education have been – and most certainly will be in future – closely connected to power and social inequalities. Throughout history, access to education has been reserved either for the elite, for men, or the privileged. Also today, we see that the current policies and ideology for education in society are a mirror for the government and elected representatives in Parliament.

A responsible educational institution

A good school, as well as a good university, must acknowledge and take responsibility for its ability to influence both the personal development of the pupil and the student, as well as the spread of knowledge at a global level. And the only way to succeed is to understand the potential of educational institutions as nexuses for global solidarity. A university which is firmly rooted in academic freedom is an independent body able to criticize, propose radical ideas, and challenge dominant paradigms. This is the reason that political and social movements often start, or find a nurturing environment, at universities. Although it might seem so obvious that it does not need to be stated, a school, as well as a university, is a place where beliefs, opinions and ideas are exchanged across the sometimes rigid boundaries of cultural, social and political backgrounds. It is a place of synthesis and discovery, and a place that of necessity encourages openness to free thinking – because at any given time, a sudden liberating thought may arise

According to Geoffrey Boulton (2009), the challenge for universities now is to articulate clearly what they stand for, to speak the truth to the authorities, and to be steadfast in upholding freedom and autonomy as crucial values to safeguard the future of society. But a responsible university is also a place where students are aware of their rights to participate in every committee, and where engagement is seen as an obligation towards a common social goal.

To reimagine democratic society we must also search for the correspondence between freedom and education, or freedom *in* education: What parts of the learning methods and curriculum ought to be elective and decided by the school, the single teacher or the pupil – and how much should be compulsory and a part of a common culture and a historical-social canon? How should the rights of every child to be guided into their cultural heritage be balanced against the right and freedom of the parents to raise their children according to their own religion and faith? And how should the protection of an individual's right to intellectual and spiritual freedom be balanced against the recognition that the values may be expressed and reasoned for differently in different religions and belief systems? The answers to these questions are dependent upon the ability of schools and universities to stimulate and create autonomous individuals – who think independently, pose critical questions, make ethical choices and participate in the social debates (Bostad, 2010a).

As we also have seen in the recent debate on general education in the United States, intellectuals like Anthony Kronman (2007) and Martha Nussbaum (2010) have argued for a new non-profit perspective on higher education; Kronman with an existentialistic approach and Nussbaum with a moral quest – both of them by appealing to humanistic values. Where Kronman sets out to meet the future of universities with giving the students existentialist space for enquiry and wondering, Nussbaum argues for a new humanism where education is a moral tool not only for respecting diversity, but for improving our understanding of the current complexities in society. General education is needed for the ability to solve transdisciplinary problems in a just and informed way, according to Nussbaum. General education is a means for the personal transformation of being an individual and finding a way of mastering our own life, is Kronmans' perspective.

The goal for higher education is not merely tolerance, but understanding⁸. To engage with the other person is crucial and this takes courage;

⁸ Linda Alcoff during a lecture in connection with the bestowing of honorary doctorates at the University of Oslo, 30 August 2011

to disagree with someone is often challenging due to the framework or the settings. We must teach and encourage the student to be critical through seeking confrontations with people they disagree with – visiting other cultures and religions and trying on their way of looking at the world.

The Norwegian social scientist Nils Christie wrote a book called “Prison Guards in Concentration Camps” (Christie, 2010) – a book about Norwegian prison guards in concentration camps in Northern Norway during the Second World War. This book has been ranked as one of the 25 most influential works in Norwegian social science ever. Christie shows the effect of seeing others as human beings – and more importantly why humans are capable of violence and torture. Prison guards who had even the smallest minimum of *personal contact* with the prisoners did not participate in the torture; reading letters the prisoners wrote, knowing they had a family back home, made the guards aware of the human nature and dignity of the prisoners and put restrictions on their primitive view of the prisoners as animals.

Christie provides important insights into what constitutes society. And he asks how we create a society where everyone contributes and participates. Such knowledge of human behaviour is also important for scholars on democratisation mainly because it looks at core values also central in human rights and the modern welfare state, such as the intimate relationship between a social right and a social duty. In her book “Not for Profit” Martha Nussbaum argues for a new humanism where education is a moral tool for “the ability to think critically; the ability to transcend local loyalties and to approach world problems as a “citizen of the world” (Nussbaum, 2010, p. 7), and finally, the ability to imagine sympathetically the predicament of another person”. In this way, higher education may contribute to and stimulate a modern democracy for our time – seeking to be the room for inquiry that matures the students as well as society as a whole.

References

- Adorno, T. W. (1971). *Erziehung nach Auschwitz*. In T. W. Adorno (Ed.), *Erziehung zur Mündigkeit. Vorträge und Gespräche mit Hellmut Becker 1959-1969* (pp. 92–110). Frankfurt a.M.: Suhrkamp.
- Arendt, H. (2004). *Menneskets Vilkår*. Oslo: Klim forlag.
- Bateson, G. (1972). *Steps to an Ecology of Mind*. New York: Chandler Publishing.
- Bostad, I. (2006). *Filosofi som metode*. In I. Bostad & T. Pettersen (Eds.), *Dialog og danning*. Oslo: Spartacus.

- Bostad, I. (2009). *Dannelse med tellekanter. Samtiden*, 2. Oslo: Aschehoug.
- Bostad, I. (2010a). Annerledeshet og frihet. In J. Kristeva & Engebretsen, E. (Eds.), *Annerledeshet – sårbarhetens språk og politikk*. Oslo: Gyldendal akademisk forlag.
- Bostad, I. (2010b). *The University in Contemporary Society: What is the core of the University?* Lecture given at the Unica Student Conference, Rome 22-25 September 2010, published in the Proceedings from the conference by Università Sapienza, Roma Tre, Tor Vergata and Foro italic.
- Bostad, I. (2012). *Existential education and the quest for a new humanism: How to create disturbances and deeper thinking in schools and universities?* To be published in the proceedings from the CESE (Comperatice Education Society in Europe) in 2011. Amsterdam: Sense Publishers, in association with CESE.
- Boulton, G. (2009). *What are universities for?* Lecture EUA Prague 2009, University world news, 3. August 2010.
- Christie, N. (2010). *Fangevoktere i konsentrasjonsleire*. Oslo: Pax forlag.
- Dewey, J. (1927). *The Public and Its Problems*. Chicago: Swallow Press.
- Elster, J. (1999). *Deliberative Democracy*. Cambridge: Cambridge University Press.
- Gadamer, H-G. (2004). *Sandhet og metode*. Århus: Systime.
- Habermas, J. (1993). *Justification and Application. Remarks on Discourse Ethics*. Cambridge, Mass.: MIT Press.
- Hansen, F. T. (2008). *Å stå i det åpne: dannelse gjennom filosofisk undren og nærvær*. Copenhagen: Hans Reitzel.
- von Humboldt, W. (1827/1963). *Über den Dualis*. Werke, Band 3. Stuttgart: Cotta.
- Kronman, A. (2007). *Educations Ends – Why our Colleges and Universities have given up the meaning of life*. New Haven, CO: Yale University Press.
- Nussbaum, M. (2010). *Not for Profit, Why Democracy needs the Humanities*. Princeton, NJ: Princeton University Press.
- Næss, A. (1941/1982). *En del elementære logiske emner*. Oslo: Universitetsforlaget.
- Peters, R. S. (1972). Education as Initiation. In R. D. Archambault (Ed.), *Philosophical Analysis and Education* (pp. 87-113). London: Routledge & Kegan Paul.
- Rorty, R. (1999). *Philosophy and Social Hope*. London and New York: Penguin.
- Skirbekk, G. (2009). *Rasjonalitet og modernitet. Essays i filosofisk pragmatikk*. Oslo: U-forlaget.
- Witoszek, N. (1998). *Norske naturmytologier*. Oslo: Pax forlag.

This article has been subject to blind review.

Accountability under Ambiguity

Dilemmas and Contradictions in Education¹

Petter Aasen, Vestfold University College, Norway

Nothing is as political as education. It is through education we reproduce our culture – our values, habits, attitudes and knowledge – from one generation to the next. It is by education we create conditions for cultural, social and economic renewal and growth. Hence, education is connected to ideology and power in different ways. The Danish social scientist Peter Dahler-Larsen (2003) has described these relations by using the three concepts policy, politics and the political. In this article I will draw upon these concepts to discuss new forms of governing education and how they challenge the system, schools, teachers and teacher education.

Key words: Educational Policy, Governing Education, Reproduction of Culture

Education policy

A policy is typically described as a principle or rule to guide decisions and achieve rational outcome(s). Policy refers to the 'what' and the 'why' generally adopted by governance bodies within the public and private sector. A policy can be considered as a statement of intent or a commitment. A policy guides actions towards those that are most likely to achieve a desired outcome.

The concept policy or education policy refers to decisions made by bodies with legal and legitimate authority. Education policy is constituted through

¹ The article is based on a keynote presentation at the EARLI conference "Research in Teaching and Teacher Education", University of Bergen, Norway, June 13th – 15th 2012.

legislation, regulations, curricula and assessment systems. In Norway the national parliament and national government define the goals and decide the framework for the education sector. The Ministry of Education and Research and the Directorate for Education and Training are responsible for carrying out national education policy. The latest national comprehensive reform in the 10-year compulsory school and in upper secondary education and training from 2006, in English referred to as the Knowledge Promotion Reform, is an expression of education policy. It introduces certain changes in substance, structure and organization from the first grade in compulsory school to the last grade in upper secondary education and training. However, education policy is also shaped by other agencies. Norway has a two tier-system of local government, and together with the state, the regional level (consisting of 19 counties) and local level (consisting of 430 municipalities) form the political-administrative apparatus (Aasen & Sandberg, 2010). Regional and local levels are essential in the implementation of national policies, but at the same time they are autonomous political levels. To a certain extent, counties and municipalities are self-governed, empowered by authority delegated from the State, set out in legislation. Thus, the municipalities and counties are essential in the implementation of national policies, but moreover they are self-governed entities with responsibility to constitute and authorize education policy.

The cornerstone of the Knowledge Promotion Reform, as expressed in reform documents and other policy documents prior to the reform, is that it aims to achieve new forms in governing, management and administration of schools, which mark a systems change (Aasen et al., 2012). The intentions of the Knowledge Promotion Reform as a governance reform are increased decentralization and devolution of decision-making and responsibilities in the education sector. The term school owner in Norway refers to county authorities with responsibility for upper secondary schools and training establishments, and municipalities with responsibility for primary and lower secondary schools – and through the reform school owners along with schools and teachers are intended to gain more autonomy and freedom. The systems change envisioned is intended to improve the conditions for education by fostering a local culture of learning and developing schools as learning organizations. The reform also marks a serious effort to introduce robust performance management and results management into the Norwegian education system. Key measures in the governance approach include competence aims, a national quality assessment system and an emphasis on the quality of results and the documentation of results achieved. Local competence and capacity building are stressed as well as the development of

schools as knowledge-based learning organizations, and there is emphasis on clear and determined leadership in schools as well as in classrooms (Aasen et al., 2012).

The principle of local autonomy is a vital part of the Norwegian political system, and the balance between central and local governance, central control and local independence, is continuously debated (Telhaug, Mediås & Aasen, 2006). The recent reform reinforces deregulation and pushes policy-making authority downwards in the education system. Based on the analysis of the stated intentions of the reform, four key elements can be identified as central to the Knowledge Promotion Reform's approach to governance: objectives- and performance management, knowledge-based management and practice, empowering the teacher and school leader professions and accountability.

Policy motives and governance dimensions and instruments

Behind the Norwegian reform, we can identify three main motives for decentralization (Sandberg & Aasen, 2008): Firstly, the democratization motive, which argues for a renewal of democratic influence. Through decentralization the political decisions will be taken close to where education is taking place. Secondly, the efficiency motive, which argues that decentralization means better disposition of resources and modalities for reaching the given goals. And, finally, the professional motive, which argues that changes in knowledge volume and structure demand more professional control over education content and methods for learning. Hence, the professionalization of school leaders and teachers and new professional understanding and practice are essential.

Decentralization of education, irrespective of motives, puts in focus the balance between political and professional power and control over education. The governing or steering of an education system can be described in two dimensions. On the one hand, it is a question of where the power is; on the other, it is a question of who has the power. These two dimensions can be illustrated graphically as shown in Figure 1 below (Lundgren, 1977; Aasen et al., 2012).

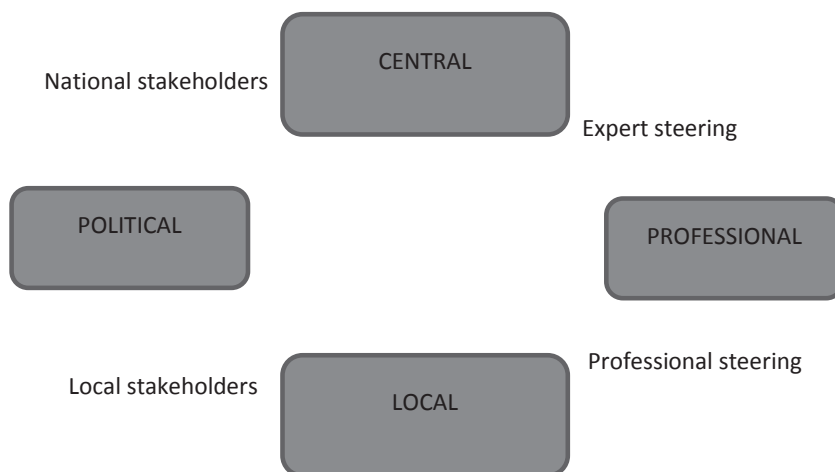


Figure 1. Dimensions in education governance.

On the vertical central – local axis we can use various terms such as state, county, municipality or community. The same structure holds not only for centralization – decentralization but also for the relation between state and private school enterprises. Through education we reproduce our culture from one generation to the next; through education we create the conditions for social coherence and cultural and economic growth. Accordingly, having a common value-base requires some form of central goals and control. In that sense there is always a need for a degree of centralization of national school systems.

Basically, there are four instruments or systems for political governing of education (Eide, 1973; Lindensjø & Lundgren, 2000; Whitty, 2002):

- The legal system.
- The economic system.
- The ideological system (defining goals, content and outcome).
- The evaluation system.

These four systems interact. The basic characteristics of centralized systems are that they are governed by resources through the economic and legal system, and thus centralized systems are strongly regulated and framed. In a centralized system ideological steering devices are expressed in e.g. rather detailed curricula describing the subject matter, approved textbooks

and certified teacher education programs. Movement towards decentralization weakens governing by resources and legal regulations. If decentralized governance is to serve the purpose of promoting equality and reproducing and renewing a common value- and knowledge base, what remain for the center in a decentralized system are the ideological system and the evaluation system (Aasen, 2007, Aasen et al, 2012).

Ideological steering is, however, challenged by the rapid changes in knowledge. Access to information is rapidly increasing. Schools as institutions were created in a society poor in information. This is reflected in the way curricula and syllabi have been constructed (Lundgren, 1979). In information-dense societies the gravitation point in curricula cannot anymore be the organization and order of content. We have reached a Copernican turning point, in which curricula must be based on how knowledge is structured and articulated in basic concepts, theories, models and competencies, which in their turn must be expressed in terms of goals and expected learning outcomes. With the new and rapidly changing economy and production, as well as globalization, and the rather dramatic changes in the volume and structure of knowledge, it is becoming more and more difficult to plan and regulate the content of education centrally.

Steering education by expressing goals to be achieved and by evaluating the achievements demands new conditions for governing. To function as a steering device goals have to be clear. Here a new problem or dilemma arises. In a modern, complex society with fragmented and specialized sectors, and in a multicultural and globalized society, there is pressure from various interest groups, and thus goals easily become broader and more abstract. Consequently, there are processes within a nation such as Norway which are contradictory to the demands of steering by clear goals (Aasen, 2003).

One way out of this dilemma, as we have seen in the Norwegian reform, is to reorganize the governing and administrative system towards decentralization and renew the steering documents. However, with decentralization and moving from central towards more local governing, the question of who has responsibility is sharpened. Thus a movement towards decentralization focuses the professional ability of teachers and their professional responsibility and accountability. The horizontal axis in Figure 1 above illustrates this tension between political and professional governing of education.

Responsibility and accountability

To govern by goals requires clear goals. But then again these goals must give space for interpretation. The essence of goals is that they are not formed as rules. Goals have to be owned by those who have the responsibility to implement them. Here, the essence of goals meets the essence of professionalism in the sense of having a knowledge base to interpret and make goals concrete in relation to teaching and learning processes. Furthermore, it calls for a clear division of responsibility and, hence, accountability. Thus, new forms of governing exemplified by the Norwegian reform imply that political authorities at national and local level should not enter the school gate. At the school gate professional teachers should take responsibility, and in turn be accountable for the pupils' learning outcomes when they leave through the school gates.

In one respect education has always been governed by goals. That is the essence of pedagogy. But steering learning by goals and learning outcomes is not the same as steering the system by goals, competence aims and learning outcome. This means that governing by goals needs more than goals and learning outcomes for individual pupils or students. The goals must, moreover, express the overall societal goals for the education system and the quality ambitions of the system. Therefore, decentralization and governing by goals and outcomes/results introduces a system with two legs. One is the articulation and implementation of goals, competence aims and learning outcomes; the other is the construction of control and accountability systems (Darling-Hammond, 2004; Hopmann, 2008). To govern by goals and learning outcomes demands that goals are followed up and evaluated. And, above all, it demands that the goals and outcome ambitions are formulated in such a way that they can be assessed and evaluated.

Again, as pointed out earlier, key measures in the new governing approach in the Norwegian reform include a national quality assessment system and an emphasis on the quality of results and documentation of results achieved. The consequence of more emphasis on assessment, evaluation, follow-up measures and quality assurance is that education becomes more transparent. By making the results more visible, the pressures for change increase. Results or outcomes that are public are the basis for accountability. However, seeing this from a broader political perspective, a new dilemma is discernible. During the last decade the media world has changed dramatically. New modalities have been established and competition has intensified. Thus, the pressure from the media on decision-makers has strengthened. It can even be argued that the media sets the political

agenda. Decentralization means that national politicians have lost clear-cut instruments for action. Media storms, however, tend to withdraw the initiative from the local level to an impatient central level, which affects the legitimacy of a decentralization process and can even block the implementation of decentralization. It seems also to change the balance between governing by goals and governing by standardization, by increasing the central control of education and limiting the space for professional development. It is a risk that decentralization becomes a new centralization through governing by standardization and evaluation, and so taking away the flexibility that is necessary for local development.

Our research on the implementation of the new education reform in Norway confirms this risk (Aasen et al., 2012). Political follow-up initiatives have strengthened centralized steering, both national political stakeholders and national experts, through increased evaluations, control and inspection. Accordingly, school owners, head teachers and teachers have experienced that local decision-making authority and freedom have been reduced during the reform implementation.

Early in the reform period (2007-2008), a large majority of school owners felt that they had been given greater autonomy to make independent decisions, and that the reform had increased the influence of school leaders. By 2011, only a minority of municipalities and counties felt the same way. Likewise, flexibility and openness in relation to local conditions and solutions seem to have been weakened throughout the reform period. In 2011, 5 years after the reform was introduced, only 40% of municipalities and 8 of 19 counties said their experience was that the reform provides more flexibility and openness in relation to local conditions and choice of solutions.

In 2011, when asked if they had been given more independence or autonomy than before the reform, the proportion answering that they had was 12% among upper secondary school teachers, 16% among year 10 teachers and 22% among home room teachers in grades 4 and 7. Thus from the perspective of educational actors the reform so far does not seem to have had a significant impact on empowering teachers as professional workers. On the contrary, decentralization seems to increase central control and limit the space for professional development and steering.

Politics in education policy

The above illustrates that we cannot understand the relation between education and ideology and power if we reduce the relation to decisions defining ambitions, goals, and legal, financial and pedagogical measures.

To understand the relation we also need to focus on disagreements and conflicts of interest in the policy making process and in the implementation of education reforms. Thus, the relation is also characterized by politics. Politics is a process by which groups of people make collective decisions. The term is generally applied to the art or science of running governmental or state affairs, but it also refers to behavior within civil governments. Politics can obviously also be observed in other group interactions, including academic institutions. Politics consists of social relations involving authority or power and refers to the regulation of affairs within a political unit, and to the methods and tactics used to formulate and apply policy. The concept of politics draws our attention to processes that define who gets what, when and how. Hence, in order to understand education it is vital to examine the politics of policy making processes and the ongoing conflicts over state policy with an eye to the ways in which ideological positions are mediated and transformed.

In Norwegian education reforms after World War II, we can identify different ideologies constituted by different perspectives on the relation between education and society and the goals and organization of the education project (Aasen, Sandberg & Prøitz, forthcoming). In examining the education system they define different problems to act on and prescribe diverse solutions at system as well as school level. The different political ideologies have different views of the knowledge base for education policy and practice. Furthermore, they have different answers both to Herbert Spencer's powerful question *What knowledge is most worth?*, and to Michael Apple's even more provocative question *What counts as official knowledge?* (Spencer, 1859; Apple, 2003).

Tensions and contradictions

The different ideologies work simultaneously and comprise different perspectives on knowledge and education: different understandings of the education project and the relation between education and society. In the policy documents introducing the new national education reform in Norway and in the central political and administrative follow-up initiatives, different ideologies can be identified. This illustrates the fact that there are always contradictions embedded in education reforms creating tensions on several dimensions.

On the social dimension (Figure 2) we witness strains between education as an individual good and education as a common good, between equity

as equality and equity as equivalence, and between the importance of early intervention and a more patient approach to learning.

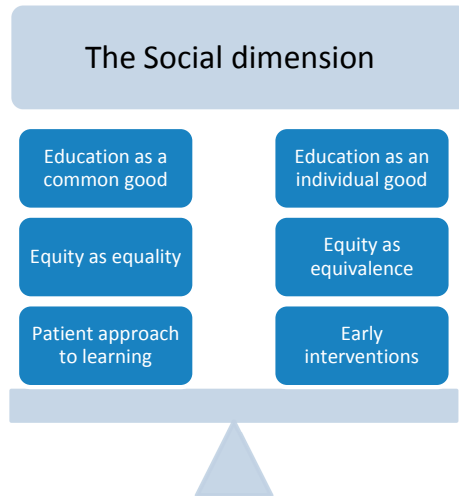


Figure 2. The social dimension in education policy.

On the governance dimension (Figure 3) we observe tensions between national steering authority and locally elected political bodies' authority to act autonomously, and between decentralization as delegation and decentralization as devolution.

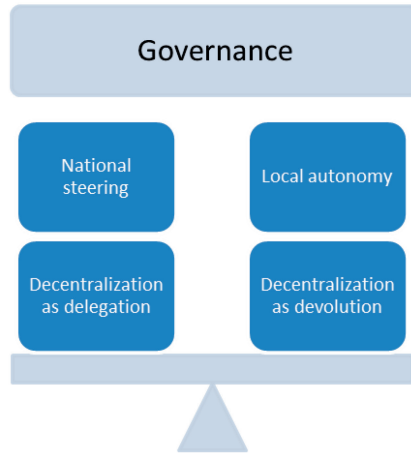


Figure 3. The governance dimensions in education policy.

On the systemic relation dimension (Figure 4) we observe tensions between central detailed control and state steering at a distance through empowering local authority. The central state demand for extensive documentation is often interpreted as a form of “feeding the beast”, while local governments and schools ask for national support.

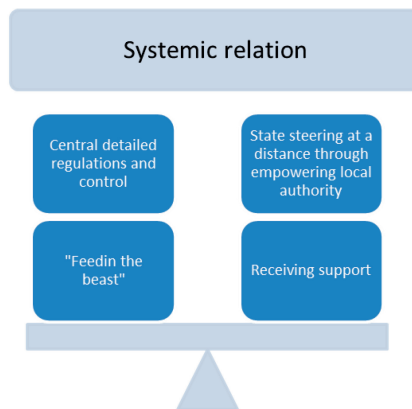


Figure 4. The systemic relation dimension in education policy.

On the knowledge base dimension (Figure 5) there are tensions between evidence-based practice and practice-based evidence, between research-based solutions and experience-based reasoning, between efficient intervention and professional reflection, and between knowledge directed to what works and knowledge focusing on when and whom it works for.

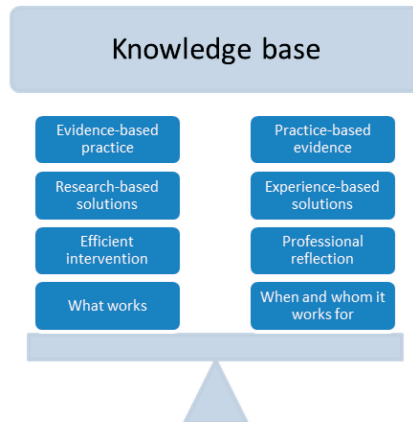


Figure 5. The knowledge base dimension in education policy.

On the school contents or subject matter dimension (Figure 6) there are tensions between knowledge and competence, between competence and skills, and between focusing on learning processes and the demand for documented learning outcome.

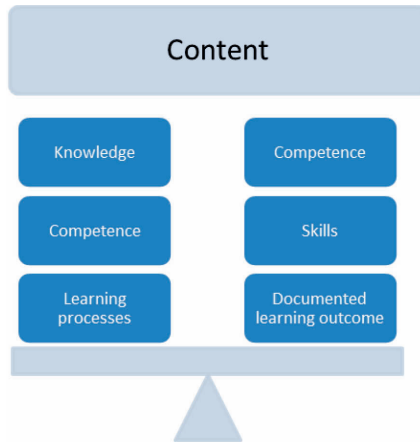


Figure 6. *The content dimension in education policy.*

Accountability is in some ways the foundation of public services today. Without accountability there is no legitimacy; without legitimacy there is no support; without support there are no resources; and without resources there are no services. However, on *the accountability dimension* (Figure 7) in education there are tensions between professionalism and managerialism; between professional trust and an increased administrative technocracy.



Figure 7. *The accountability dimension in education policy.*

Our studies of the implementation of the Norwegian reform show that these contradictions in education policy also work within education practice at the school and classroom level (Aasen et al., 2012). The contradictions challenge local authorities, school leaders, but also teachers in the classrooms. At the local and school level they can generate ambiguity and frustration. Thus, we can observe demands for a return to stronger and clearer hierarchical guidelines and mechanisms. On the other hand, however, we also can observe how school leaders and teachers collectively and in creative ways offensively occupy openings and spaces formed by the contradictions. Accordingly, the awareness of tensions and contradictions is important not only to understand the circulation of national policy documents and technical and administrative plans. The awareness of ideologies working simultaneously and thus generating contradictions can also help us to better understand the situation to those involved in education practice. This is vital since education policy must be understood as continuously remade in use, and schooling ultimately is built from the ground up.

The political in education

Policy and politics are important concepts in understanding the development of education both at system and practice level. However, to fully understand the relationship between ideology, power and education, we must include the term the political. The term does not limit the relation to decisions made by governing bodies or to policymaking processes, but implies an understanding of education as inherently a political act. Thus, the political in education refers to the fact that education procedures and practice – the questions of the 'what', 'how', 'where', and 'when' in education practice – constantly include priorities and decisions at the school and classroom level that include answers to questions like who ultimately gains the most from the ways our schools, and the curriculum and practices within them, are organized and operated.

The political in education points to one other fundamental argument for governing education by goals and outcomes. Resources and rules can govern areas or sectors within which we have profound research based knowledge and agreement of the relations between goals and methods. To take a simple example from traffic policy, if we know that there is a clear relationship between speed, the conditions of roads and car accidents, we can implement governing by resources and rules. On the other hand, the less general knowledge there is of the relation between goals and methods, the more governing by goals is applicable. Education defi-

nately can draw upon researched based evidence, but practice and experience based reasoning is equally important. This in turn demands qualified personal with skills, knowledge and professional judgment and discretion to adjust methods to specific circumstances. Decentralization of education and governing by goals and results demands new forms of qualifications of teachers. Furthermore, governing by goals demands new forms of school management and leadership. As pointed out above, key elements in the Norwegian Knowledge Promotion Reform are objectives- and performance management combined with clear allocation of responsibility and accountability of school owners, schools and professional teachers. The government has also recently introduced reforms in teacher education to meet new and different professional demands. The programs enforce both a research based and practice based knowledge and professional development.

Conclusion and implications

My argumentation in this article can be summarized in the following way: Central ideological steering of education is challenged by the rapid change in information and knowledge; it is difficult to plan and regulate the content of education from the central political level. The gravitation point in curricula cannot anymore be the organization and order of content. Curricula must be based on how knowledge is structured and articulated in concepts, theories, models, competencies and skills, which must be expressed in terms of goals and expected learning outcomes. Steering education by expressing goals and competencies to be achieved and by evaluating achievements demands new conditions for governing. To govern by goals require clear goals. At the same time they must give space for local and professional interpretation.

The intention of the Norwegian Knowledge Promotion Reform as a governance reform is increased decentralization and devolution of decision-making and responsibilities in the education sector. A movement towards decentralization focuses on the professional ability of teachers, their professional understanding, reasoning, responsibility and accountability. I have described the new forms in governing as a balance between central and local steering; and between political and professional power and accountability. I have underlined that the professionalization of school leaders and teachers and a new professional understanding and practice are essential elements in recent education reforms, in Norway as elsewhere.

New forms of national governance require a balance of responsibility between the center and the periphery, between politicians, management and professionals. There must be a clear division of accountability, and furthermore, governing by goals demands governing by participation. Those who are implementing national goals must be given an opportunity to own the goals. The goals must be expressed in such ways that they give openings for interpretation and thus create working processes involving all that are responsible for implementation. To meet new demands education institutions have to learn how to use the collective capacity and competence. Thus, in order to meet the new challenges introduced by new forms of governing, teachers as a collegium must be given space for professional development to avoid recentralization and de-professionalization.

Steering documents like curricula must be expressed in terms of goals, learning outcomes and guidelines, with teachers having control over the selection of content and methods. The new forms of governing include a system for assessment, evaluation and quality assurance. This must build on a clear division of responsibility, which means that there must be both central and local evaluations and quality assurance. Evaluation and quality assurance must be balanced and not the dominant instrument for central governing. We need accountability which serves three functions: giving quality assurance; showing the public that they are getting value for money, and above all helping the system learn from systemized experiences and documentation.

Reforms must embrace all levels and all instruments for governance. This means that changes in the legal system must follow changes in the other systems and vice versa. Decentralization calls for a new type of central governing; new competencies must be recruited and developed. Central authorities must have the ability to govern by goals and by results and at the same time maintain a hands off stance. The new forms of governing make education more transparent and thus more open for public criticism and debate. This again challenges local capacity building and teacher education.

The question is how teacher education programs address education policy, the tensions in education created by the politics of education, and the professional role as inherently a political act. Forms of governing and professional accountability are ambiguous. The professional development of teachers depends on the ability of teacher education to empower teachers as a profession to meet the ambiguity by occupying the spaces given by tensions and contradictions generated by the politics in education policy. Nothing is as political as teacher education.

References

- Aasen, P. et al. (2012). *Kunnskapsløftet som styringsreform – et løft eller et løfte?* Rapport 20/2012. Oslo: NIFU.
- Aasen, P. & Sandberg, N. (2010). Hvem vet best? Om styringen av grunnsopplæringen under Kunnskapsløftet. *Acta Didactica*, 4(1), Art. 18.
- Aasen, P. (2007). Equity in Educational Policy. A Norwegian Perspective. In R. Teese, S. Lamb & M. Duru-Bellat (Eds.), *International Studies in Educational Inequality, Theory and Policy* (pp. 127-142). Volume 2. Dordrecht: Springer.
- Aasen, P. (2003). What happened to social democratic progressivism in Scandinavia? Restructuring Education in Sweden and Norway in the 1990s. In M.W. Apple et al. (Eds.), *The State and the Politics of Knowledge* (pp. 109-147). New York: RoutledgeFalmer.
- Aasen, P., Sandberg, N. & Prøitz, T. S. (forthcoming). Knowledge Regimes and Contradictions in Education Reforms. *Educational Policy*.
- Apple, M.W. (2003). The State and the Politics of Knowledge. In M.W. Apple et al. (Eds.), *The State and the Politics of Knowledge* (pp. 1-24). New York: Routledge Falmer.
- Dahler-Larsen, P. (2003). Det politiske i evaluering. *Studies in Educational Policy and Educational Philosophy*. Uppsala University: E-tidsskrift.
- Darling-Hammond, L. (2004). Standards, Accountability, and School Reform. *Teacher College Record*, 106(6), pp. 1047-1085.
- Eide, K. (1973). *Utdanningspolitikk*. Oslo: Gyldendal Norsk Forlag.
- Hopmann, S. (2008). No child, no school, no state left behind; schooling in the age of accountability. *Journal of Curriculum Studies*, 40(4), pp. 417-456.
- Lindensjö, B. & Lundgren, U. P. (2000). *Politisk styrning och utbildningsreformer*. Stockholm: Liber.
- Lundgren, U. P. (1977). *Model Analysis of Pedagogical Processes*. Lund: CWK/Gleerup.
- Lundgren, U. P. (1979). *Att organisera omvärlden. En introduktion till läroplansteori*. Vällingby: Liber Förlag.
- Sandberg, N. & Aasen, P. (2008). *Det nasjonale styringsnivået. Intensjoner, forventninger og vurderinger*. Rapport 20/2008. Oslo: NIFU STEP.
- Spencer, H. (1859). What Knowledge Is Of Most Worth? *Westminster Review*, July.
- Telhaug, A. O., Mediås, O. A. & Aasen, P. (2006). The Nordic Model in Education: Education as part of the political system in the last 50 years. *Scandinavian Journal of Educational Research*, 50(3), pp. 245-283.
- Whitty, G. (2002). *Making Sense of Education Policy*. London: Paul Chapman Publishing.

Part 2

Educating Teachers: A Comparative Perspective across the Professions

Summary of a Keynote Address by Lee S. Shulman, Stanford University, USA

Key words: Signature Pedagogy, Honesty, Humility, Humor, Hope

A comparative study of the signature pedagogies of different professions

My interest is teaching and learning. I am interested in the quality of pedagogy. What I decided to study together with my research colleagues at the Carnegie Foundation was how people are prepared to become members of professions, how they learn to work as members of professional communities. And we conducted research across a number of professions. We studied how people learn to be lawyers, how they learn to be engineers, how they learned to become members of the clergy – priests, pastors and rabbis. We investigated how students learn to be nurses and physicians. We studied how they learn to be business leaders and teachers.

We even studied how students become members of the academic professions. To do that, we studied how people learn to be professional scholars in programs in the fields of mathematics, history, literature, chemistry, neurosciences and that most complex field of all, our own domain of education. How do they learn to be professionals, we asked? How are they taught? What are the pedagogies of the professions? What are the “signature pedagogies” of each profession and how do those particular forms of pedagogy mark and define the character of each professional field and its practitioners?

We didn’t think that any one profession had it perfectly. But we thought if we can examine this variety of pedagogies carefully, through reading and

research, through careful case studies and ethnographies, through interviews and surveys, we would discover a complex array of approaches and methods. And we hoped to learn about the underlying models of professional preparation from analyzing the similarities and differences among those approaches and to try to understand the reasons for them.

Our Carnegie Foundation staff consisted of philosophers and psychologists, sociologists and anthropologists, educational scholars and historians. We also worked with members of each of the professions we were studying, thus comprising a rich set of interdisciplinary collaborative teams. These studies went on in parallel at the same time, as we attempted to ensure that members of different research teams interacted, participated in research with one another, and learned from one another. We took seriously the “wisdom of practice,” so we asked, for example, why certain methods of teaching had survived in medicine or nursing for so many decades, and why very different approaches have flourished in law or religious seminaries, and yet other approaches in engineering. We didn’t take their survival as self-evident evidence that an approach was good, but we thought it would be interesting and instructive to explore its persistence.

In that sense, we not only looked at the *wisdom* of practice, we also examined carefully where we discerned the *ignorance* of practice. That is, we looked critically at practices that appeared to accomplish some purposes successfully while at the same time they caused damage to other goals of professional education. And from the perspective of what we knew about the learning sciences and what we knew from what educators in each profession explained that they trying to achieve, we critically examined their approaches. So we were not uncritical by any means as students of these pedagogies, but we were enthusiastic learners and we were trying to give the benefit of the doubt to each profession and its pedagogical practices.

Habits of mind, habits of the hand and habits of the heart

From our studies, we concluded that all professionals must learn some combination of three things: habits of mind, habits of practice and habits of the heart. As we examined their role in other professions we also developed some insights into the signature pedagogies of teacher education.

Whenever we looked at any form of professional education, included teaching, we asked “How do they teach the *habits of mind* necessary for practice in the profession, that is, the ability to think like a member of the profession?” Thus, in legal education, both the faculty and the students argued

that the primary purpose of legal education was to teach future practitioners how to “think like a lawyer.” The pedagogy of the law did not aim at teaching the practice of law, or the values and ethical dispositions for legal work.

The next question was “How do they teach the habits of practice, the practical, technical skills of the profession”, which we called “habits of the hand?” There is no profession that doesn’t require an enormous body of technical skills that are needed for practice. In teacher education, we may want our candidates to become “reflective practitioners,” but we need for them to be skilled practitioners first so they have something worthwhile to reflect upon. Teacher educators are frequently guilty of distorting the world of teacher education comes as we have lost the balance between practice and reflection. We are teaching our students to be far better at reflection than they are at actually performing as professionals, at really doing things. Professionals only develop through a substantial amount of time in developing skills, even when the skills appear simple and routine. As a president of Teachers College, Columbia University observed many decades ago, we are often embarrassed when we say that we teach elementary school teachers how to write on the blackboard correctly or create a lovely, engaging bulletin board, because those appear to be such mundane, mindless skills. But those who train surgeons spend hundreds and perhaps thousands of hours teaching surgeons how to sew, and they don’t apologize for it. Teacher education should be similarly adamant about the importance of teaching the habits of practice.

The third domain is habits of the heart. These are the moral emotional, ethical cores of professional work. In every profession, in addition to learning how to think and practice appropriately, professional learning requires the formation of professional identity, the sense of self, integrity, and ethical responsibility. This is equally true of the education of teachers.

Those three forms of learning, which we at times called apprenticeships, must develop in some integrated balance, in a manner appropriate to each profession and define the character of the signature pedagogies of professional education. So as we analyzed each of the many professions we studied, each one for three or four years of study, we asked how they created apprenticeships of thought, apprenticeships of practice and apprenticeships of identity and integrity. Indeed, we analyzed doctoral studies across the disciplines in those terms as well, because we viewed learning to be a scholar as a form of professional learning, of developing habits of mind, practice and moral identity. Becoming a member of the academic profession, of the community of scholars, is as much a process of professional formation as is learning to be a physician, an engineer or a pastor.

Routines are central to signature pedagogy

When we think of the pedagogies of professions, we often think first of complex forms of problem solving, judgment, decision-making and highly complex performances. Indeed, there is truth to that perception, because most professions are characterized by the need for professionals to make complex judgments under conditions of uncertainty and unpredictability. Nevertheless, one of those things we began to see with every profession was that to learn to be a professional inevitably requires the development of extraordinarily well-oiled highly skilled routines. Yes, routines. Those things that happened again and again and again are incredibly important to professions. And to learn them, by and large, you have to practice. You don't learn them in one shot. In fact, the reason we call them *habits* of mind, *habits* of practice, and *habits* of the heart, is because you learn them by *doing* them repeatedly. There is no angel that lands on a student's shoulder and sprinkles magic dust on them and suddenly they know how to the practice. In fact, if you look at skilled practitioners like musicians, chess players and athletes you notice, even at the peak of their careers, that they are repeatedly practicing their basics skills. We observed that across most forms of professional pedagogy, there are three characteristics that were found to be signatures. We named these (in the words of my Carnegie Foundation Anne Colby) *enactment, embodiment and dailiness*. The first term describes the observation that the pedagogies of professions are active pedagogies. It's rare for students to sit there, sleeping and texting or texting and sleeping. They do not learn by listening and remembering. Because even in large classes they never know when the instructor is going to say "and what's your definition of the case?" and the instructor expects them to be ready. Most representative of this kind of pedagogy is clinical rounds in medicine and nursing, where every day, students are visible and active, accountable for their performances, their diagnoses and strategies, and for the ethical quality of their decisions. The faculty members are expected to *embody* in their manner and their thought the values of the profession. This sort of teaching does not occur occasionally or rarely, but indeed on a daily and routine basis.

Formation of professional identity

In learning to be a professional, what's happening is not just the acquisition of knowledge and skill and values in separation. All of these learnings are embodied, integrated and internalized into the formation of a *professional*

identity, an identity that is modeled by the instructors and the more mature practitioners with whom the candidate interacts. The profession is being learned and developed; professional identity is under formation. I think the term in German or Norwegian context would be *Bildung*, or *dannelse*.

In some professions, you can observe the integration of those pedagogies sometimes working well. Nursing I think, often does it beautifully and yet often it can fall short in the apprenticeship of thought. Law is lacking in the apprenticeships of practice and integrity. So, the first big challenge for all of us teacher educators is how do we pedagogically develop and change our methods so that we strive to create an integration of apprenticeships. In the United States I would say that we handle the teaching of planning, reflection and values stuff much more effectively than the teaching of practice. If you compare the setting in which we teach teachers to practice with those used in nursing or in medicine or in engineering, the other professions have much more structure, routine and public performance. They use simulations where students have to do things again and again, perceptually, intervening, and lots of embedded assessment. In these other fields there is almost no “high stakes assessment” but much more case assessment that is going on every single day. There is an important lesson here for teacher education.

A fourfold blessing of honesty, humility, humor and hope

Even in the presence of the routines of signature pedagogies, every profession must prepare its future practitioners for the inevitability of surprise. And that’s true, not only for us teachers and teacher educators, for all of scholars of teacher learning as well. I know you have been told you have a successful dissertation when your hypotheses have been confirmed. I have a secret for you: that’s my definition of a boring dissertation. You have a successful dissertation when you have findings that shock and surprise you. You must seek findings that challenge your assumptions and surprise you. You become a real scholar when you get findings that put you in a state of amazement. How did that happen? I’m in the state of amazement almost every time when I watch a gifted teacher teach. How in the world did she pull that off? But without that sense of amazement we would be stuck in the routine. It is the blend of the routine and the surprising, the skill and the strategy, that professional mastery lies.

So let me leave you with a fourfold blessing that I learned when we did the study of the professional education of clergy and I interviewed a professor of church history, William Ferry, at Howard University. He said

that he teaches his students four principles: Honesty, Humility, Humor, and Hope.

Honesty

The first is honesty. You must be honest! You must call them as you see them. You must not force, allow yourself to see the world the way you ideologically would like to see it. Honesty is the first principle.

Humility

The second principle is humility. You must always recognize the limits of your own perceptions and understandings. The world is more complex than we are capable of grasping and is it only if we can approach what we do with humility that we are, along with the honesty; capable of doing the job we are meant to do. But one must be careful. When you put honesty and humility together it can become pretty good recipe for clinical depression. Try it someday.

Humor

This is why the third principle is humor. You must learn to laugh at yourself or at one another to not be so arrogant that we don't see our own absurdity at times. To try and to recognize this sense humor is an absolute prerequisite to wisdom.

Hope

But finally, the fourth H, without which none of us can educate and investigate, is hope. In spite of the problems honesty creates, because we have to see the world as it is and not only as we would love to see it. We are educators because we have some kind of optimism, some kind of hope.

As educators, we are committed to doing something so that we can make the world a better place. That is the heart of our professional identities as teachers, educators of teachers, and scholars of teaching. And all I can wish for you is that you can engage together in fulfilling our shared hope of making this world a better place for ourselves, and most important, for the next generation.

This article has been subject to blind review.

Challenges for Teacher Education in Developing Countries: The Case of Tanzania

Stella Damaris Ngorosho, Agency for the Development of Educational Management, Bagamoyo, Tanzania
Ulla Lahtinen, Åbo Akademi University, Vaasa, Finland

Teacher education is the base in the process of developing teaching and learning in a systematic way. The role of teacher education is crucial for the professional development of teachers expected to work at various levels of education. However, teacher education in developing countries faces great challenges related to recruiting, training and sustenance of teachers. In this article we describe challenges teacher education in Tanzania faces and explore connected phenomena and problems. The article firstly gives an introduction including the economic situation of the country and an overview of the school and education system in Tanzania. Secondly, the article describes the current challenges that face the teacher education sector; and thirdly, it discusses how the challenges are further intensified by globalization processes which seem to create confusion between national identity and global trends. In general, the article argues that developing effective teacher education is a responsibility Tanzania must shoulder to meet global challenges where effective teacher training and teacher professional development are indispensable. Pre-service and in-service programmes must be organized to help to update and familiarize teachers with new developments in education in terms of pedagogy, theories, and content.

Key words: Teacher Education, Tanzanian Economy, Globalization, Tanzania

This work is made available under a Creative Commons Attribution 4.0 International (CC BY 4.0) license. The license text is available at <https://creativecommons.org/licenses/by/4.0/>.

Introduction

Teacher education in Tanzania, as in other countries, is the foundation of the teaching and learning process at different levels of education. It is designed to respond to key priority areas of primary and secondary education and at the same time manage its own growth (Wepukhulu, 2002). In this regard, the main role of teacher education is to prepare and produce academically and pedagogically competent teachers committed to their teaching, learning and achievement of their students: professionals who are able to continue to develop their own knowledge and skills (Meena, 2009). In order to meet the intended role, the overall objective of teacher education in Tanzania has been set to improve the teaching and learning approaches in schools and Teacher Training Colleges through the development and implementation of appropriate intervention strategies. The strategies include an improved pre-service education and training (PRESET) programme and an effective in-service education and training (INSET) support for tutors and school teachers. The aims of both pre-service and in-service teacher programmes are stipulated in the Educational and Training Policy (ETP) document which was introduced in 1995 (United Republic of Tanzania, URT, 1995, 2005).

The PRESET programme is meant to supply well-trained teachers for the entire education system. According to Teacher Education Master Plan (TEMP), the aims of the PRESET programme include producing adequately qualified teachers to cater for the challenges impacting on different levels of education. In particular, the training aims to develop the teacher trainees in terms of knowledge, pedagogical skills, creativity and innovation, and to improve their techniques in educational research assessment and multi-grade teaching. Furthermore, the pre-service training aims to enable teacher trainees to acquire organizational, leadership and management skills in education and training (Ministry of Education and Culture, 2001).

INSET (also teacher professional development – TPD programmes) is given to teachers who are already working, including newly employed teachers. INSET is supposed to be provided constantly and consistently in order to improve the quality of teaching among teachers, as well as acclimatizing new teachers so that they can carry out effective teaching and learning (Ministry of Education and Culture, 2001). Without this training, teachers will become out of date, and unlikely to cope well with global challenges and the implications they bring to the teacher education.

Despite that Tanzania has well-established teacher training programmes, the teacher education sector in Tanzania is beset with various challenges

attributable to economic constraints and teacher professionalism. The situation is not unique for this African country, similar problems and challenges are found in several Sub-Saharan African countries. A recently published book, written by many authors, presents and analyzes the situation in Sub-Saharan Africa in general, and specifically in e.g. Uganda, Kenya and Gambia (Griffin, 2012).

The challenges in Tanzania include allocation of meager funds for the development of the education sector. As a consequence, a poor teaching and learning environment, low teachers' salaries, poor working environment, poor teacher recruitment, teacher training and retention, and lack of professional development programmes. The challenges are further accentuated by globalization processes which have, as a result, necessitated various education plans, reforms and innovations.

This article utilizes different sources of information and makes a descriptive document analysis from research and policy related documents. In short, the review assumes the status of a position paper rather than a research report. The article provides a foundation for understanding the many challenges imposed on the teacher education sector in a developing country, based on the case of Tanzania.

In the following sections, brief overviews of the state of the economy in Tanzania and school and education system are outlined. The information is intended to set out the background to the environmental and working conditions that create challenges to teacher education in Tanzania. The effects of global trends on education are presented towards the end of the article also as a concluding remark.

The state of the economy in Tanzania

Tanzania is a Sub-Saharan country located in East Africa. The area of Tanzania is approximately 945,000 square km, which has risen from a population of 35 million in the 2002 Tanzania National Census to a projected figure of 46 million in 2012 (National Bureau of Statistics, NBS, 2010). This gives an overall population density of 48 per square km. This figure explains the high birth rates of the country, which has one of the fastest growing populations in the world. The Tanzanian population is growing at about 2.9 percent, a rate which is high compared to the average population growth rate for the world (1.17%) (Wikipedia, the Free Encyclopaedia, 2011). With the policies of Education for All and Universal Primary Education, the high population growth will affect educational needs and challenge the availability of resources over time.

In addition to the fast growing population, Tanzania is also among the poorest and least developed countries in the world. More than 50% of the country's population lives below the poverty line, and 85% of those are situated in rural areas (United Nations Development Plan, 2011; United Republic of Tanzania, 2012). Country statistics indicate that the economy of the country depends heavily on agriculture which accounts for 28% of GDP, provides 85% of exports, and employs about 87% of the work force (International Fund for Agricultural Development, IFAD, 2011; World Bank, 2012). According to National Bureau of Statistics (2010), households engaged in agricultural activities such as farming, livestock, fishing and forestry are the poorest. Due to the poor economic state, it is anticipated that there will not be enough funds to support different public sectors, including education.

The school and education system

The structure of the school and education system in Tanzania consists of 2 years of pre-primary, 7 years of primary, 4 years of elementary secondary, 2 years of advanced secondary level and 3 or more years of university (2-7-4-2-3+). Generally, the delivery of education is guided by the Tanzania Development Vision 2025, formulated in 1995. In this document, education is treated as a strategic agent for mindset transformation so as to create a well-educated and learning society that will be able to respond to development challenges and to compete effectively at international and regional levels (United Republic of Tanzania, 1995, 2001).

Education is undertaken by various stakeholders such as the government (schools owned by the government are usually known as public schools), non-governmental organizations (NGOs), communities and individuals. However, the Ministry of Education and Vocational Training has the legal mandate for policy formulation, while the Local Government Authorities (districts, town, municipal and city councils) assume full responsibility for management and delivery of both formal and non-formal education services (United Republic of Tanzania, 2006). The management of pre-primary, primary and secondary education is under the supervision of the Prime Minister's Office, Regional Administration and Local Government (PORALG).

Pre-primary education is largely regarded as preparation for primary schooling and serves children from the age of five to six years (United Republic of Tanzania, 1995). Although pre-primary education is not compulsory, the government is making an effort to ensure that every

primary school has a pre-primary school (Mtahabwa & Rao, 2010). Usually there is no formal examination which promotes pre-primary children to primary schools. Instead, pre-primary education is formalized and integrated into the formal primary school system.

Primary education is considered as the main delivery system for the basic education of children outside the home (United Republic of Tanzania, 1995). The official entry age to primary school is 7 years; thus children are expected to complete primary education at 13 years of age. From the beginning of 2002, the Tanzanian government made primary education free and compulsory, and as a consequence enrolment increased in schools. This was naturally an advantage especially for poor families which could not afford to support their children's education. Findings from studies conducted in poor rural areas in Tanzania showed an almost total lack of reading materials in the environments of Tanzanian children that could support the development of literacy skills which would eventually improve school learning (Ngorosho, 2010, 2011a).

The completion of primary education is marked by sitting for the final Primary School Leaving Examination, which is mainly used for secondary school selection purposes. Children who are not selected to join government secondary schools have the opportunity to enrol onto a two year course for basic technical and vocational education or join private secondary schools. However, the remaining portion, which is usually big, of grade seven graduates goes back to society.

Secondary and higher education is divided into two cycles: the first cycle constitutes four years and prepares students for the Certificate of Secondary Education Examinations (CSEE). Students who are not selected for advanced secondary education have the option to join technical colleges, including teacher training colleges. The second cycle of secondary education lasts for two years and leads to the Advanced Certificate of Secondary Education Examinations (ACSEE). Students unsuccessful at gaining university entrance pass grades may apply for the diploma course at secondary teachers' colleges.

Teacher education in Tanzania (Figure 1) is carried out in two locations: at colleges of teacher education and at universities. The colleges of teacher education train Grade IIIA teachers for primary schools and provide a diploma in education for teachers to teach in forms one and two in the ordinary level secondary schools. The universities have faculties of education and departments of teacher education where teachers for ordinary level and advanced level secondary education and tutors for teachers' colleges are trained.

Due to a shortage of university graduate teachers, diploma teachers find themselves teaching up to form four (Babygeya, 2006). Diploma and degree graduates who are sometimes found in the primary schools were not initially trained for primary schools; rather they pursued further education at a university. There is, however, a plan to establish a diploma in primary education (Ministry of Education and Vocational Training, 2007).

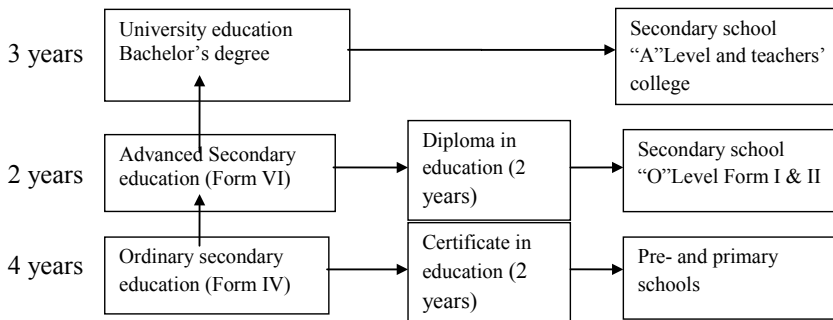


Figure 1: Teacher education structure: Modification of Malmberg & Hansén (1996).

Figure 1 indicates the interdependence of the different levels of education which are linked by teacher education. That is, teacher education in Tanzania is designed to respond to other education sectors – the primary and secondary education – and at the same time manage its own growth (Ministry of Education and Culture, 2001). Consequently, challenges emanating from the different levels of education also affect teacher education.

Challenges facing teacher education

Challenges affecting teacher education are noteworthy and can be associated not only with the environment and working conditions but also with the recruitment, training and sustenance of teachers. The state of the economy of the country together with globalization deepens the challenges even further. The challenges are described in the following sections.

Challenges related to the state of economy

Tanzania is one of the poorest countries and the national budget depends heavily on external sources. For example, about 62% of the 2011/2012 total national budget was obtained from donor countries (Ministry of Finance, 2011). Donor dependence might affect the rate of progress of development activities including the delivery of education due to the fact that the availability and timely release of the money depends on the donor country. In this regard, implementation of the country plans might either be delayed or not realized.

Due to the poor economic situation, the total budget for education has been declining every year to reach only 17% for the fiscal year 2011/2012 (Hakielimu, 2012; Ministry of Finance, 2011). About 70% of this budget was allocated to the development of educational activities. The uncertainty of funding for supporting education translates into a poor teaching and learning environment. The core problems, such as poor teaching and learning environment, shortage of teachers and poor performance, lead to challenges in teacher education. In the following sections the challenges are described.

To improve the teaching and learning environment, the government of Tanzania introduced the Primary Education Development Plan, PEDP (United Republic of Tanzania, 2001; Ministry of Education and Vocational Training, 2001). The plan covered the provision of primary education, as well as education for out-of-school children and youth, Complimentary Basic Education in Tanzania, COBET. The targets of priority investment for PEDP were: enrolment expansion focusing on classroom construction, teacher engagement and teacher deployment; quality improvement encompassing in-service and pre-service teacher training, teaching and learning materials provision; and system-wide management improvement through a range of capacity building efforts. Unfortunately, the implementation has not kept up with the plan. Scarcity of buildings for classrooms and teachers' houses is especially acute in the rural areas. As a result, there is extreme overcrowding, with class sizes ranging from 83 children (in Ruvuma region) to 89 children (in Tabora region) in some schools (Ministry of Education and Vocational Training, 2011). The large class size has led to a shortage of books, desks, and buildings. The situation is clearly seen through studies in the urban areas of Dar-es-Salaam in Tanzania, where the findings revealed that six children shared one desk and eight children shared one book (Kumburu, 2011; Mbelle, 2008).

Lack of teachers' houses produce unfavourable living conditions for teachers, especially in the rural areas where there are already harsh living conditions intensified by unreliable transport. Schools are located sometimes as far as 404 km from township areas where there is abundant transport like buses (Ministry of Education and Vocational Training, 2011). Transport in the villages relies on bicycles, motorbikes and lorries. Davidson (2007) argues that the teacher in the classroom is the main instrument for bringing about qualitative improvement in learning. But with a poor living environment, the teachers are not motivated and thus they perform below their ability (Benson, 2005).

Where living and working conditions hinder effective teaching and learning processes, the teacher education sector as an important vehicle will be affected in its mission to attain the goals stipulated in the Tanzania Development Vision 2025 (United Republic of Tanzania, 1999). The vision envisages making Tanzania a nation with high quality of education at all levels.

The results of poor living and teaching conditions translate into poor performance among the learners. Low school performance is indicated by the national examination results. Education statistics on children's performance in the final Primary School Leaving Examinations (PSLE) reveal that the overall pass rates in the PSLE examinations, taken by children aged 13 have not been impressive for the past four years. In 2006, the pass rate was 70.5% of all pupils enrolled in grade seven. In 2007, the pass rate dropped by 16.3% from 70.5% to 54.2%. The pass rate dropped further in 2008 to 52.7% and in 2009 it was 49.4%, indicating that almost 50% of the children failed. In 2010, the pass rate improved to 58%. As a consequence of low school performance, high dropout and low promotion rates are created (Table 1).

Low performance especially in reading and writing skills was reported from recent studies conducted in rural areas of Bagamoyo District in Tanzania. About 30% of the children involved in the study did not write any of the words in the test instrument correctly, and only 50% of them could read the words correctly (Ngorosho, 2011a, 2011b). Learning to read requires sufficient knowledge of the sounds of the language and how the writing system of that language works (McGuinness, 2004).

Further results from the mentioned studies indicated that grade 2 children had difficulties in identifying initial word sounds and also in deleting sounds and syllables from words (Ngorosho & Lahtinen, 2010).

Table 1. Dropout by reason in public primary schools for 2011

| Reason | Grade | | | | | | | Grand total | Drop-out reason (%) |
|------------------------------|-------|------|------|-------|-------|-------|-------|-------------|---------------------|
| | I | II | III | IV | V | VI | VII | | |
| Truancy | 3317 | 6103 | 7494 | 9894 | 7931 | 12005 | 10341 | 57085 | 74.9 |
| Pregnancy | 0 | 0 | 0 | 22 | 123 | 444 | 467 | 1056 | 1.4 |
| Death | 283 | 443 | 457 | 435 | 324 | 406 | 309 | 2657 | 3.5 |
| Unable to meet basic needs | 321 | 623 | 618 | 663 | 495 | 1356 | 509 | 4585 | 6.0 |
| Illness | 79 | 202 | 228 | 273 | 211 | 309 | 277 | 1579 | 2.1 |
| Taking care of sick relative | 51 | 93 | 89 | 132 | 77 | 274 | 100 | 816 | 1.1 |
| Others | 464 | 963 | 1086 | 1219 | 1053 | 2346 | 1337 | 8468 | 11.1 |
| Grand Total | 4515 | 8427 | 9972 | 12638 | 10214 | 17140 | 13340 | 76246 | 100.0 |

Source: Ministry of Education and Vocational Training, BEST, 2011.

Moreover, the children made errors of omission, addition and substitution of letters. This finding indicated that in order to write correct spelling, children required knowledge about grammar, structure of sounds of the language (phonology), dialects and orthography (which is related to rules about the correct way of organizing letters in order to write words correctly (Alcock & Ngorosho, 2003). Based on the findings, it was necessary for an early and systematic screening of children at risk of reading and writing difficulties and of actions to support the development of these children. Using grade one primary school children from four primary schools in Morogoro Municipality, Kalanje (2011) constructed a group-based screening instrument in Kiswahili language for identifying readers at risk of developing reading and writing difficulties.

According to Lyytinen, Erskine, Kujala, Ojanen, and Richardson (2009), when reading difficulties are left to develop for years, the child's development in acquiring the skills necessary to achieve reading are already affected. Such an effect was clearly seen in the PSLE for 2009 (Ministry of Education and Vocational Training, 2009). The pass rate for the Kiswahili examination which mostly measures the ability to read and write was 69%. In this regard, about 31% of the pupils completed primary education without adequate literacy skills. In addition, more than 5000 grade seven children who passed

and were selected to join secondary education in 2011 were found not to be able to read and write (Editor, 2012). The Ministry of Education and Vocational Training had ordered all the heads of secondary schools to give a pre-form one screening test to identify students who were selected for secondary education but who did not know how to read and write.

Dropout has, for several years, been a problem in primary schools, especially in public primary schools. About 63% of 13 year-old children completed grade seven in 2011. About 37% of children enrolled in grade one in 2005, failed to complete the seven years of primary education (Ministry of Education and Vocational Training, 2011). The main cause for dropout in primary schools in 2011 was truancy (74.9% of dropouts). Dropout challenges teachers to use effective teaching and learning methods in order to improve school performance and thus motivate children to stay in school.

Low promotion rates in primary schools are more seen in grades 1 and 4. As a result, high repetition rates are expected to occur in similar grades. Promotion rates from grade 1 to grade 2 and from grade 4 to 5 were less than 90% from 2006 to 2008 (Ministry of Education and Vocational Training, 2011). Close to 10% of grade 4 pupils were not promoted to grade 5. This is a significant percentage of pupils who are upgraded from the lower grades into grade 4 with low achievement in literacy skills. When those who fail emerge from school lacking basic reading and writing skills and obtain no other education, they face a lifetime of disadvantage. This kind of situation challenges the training of teachers to include teaching methods of promoting children's development in literacy skills.

Challenges in teacher education

Teacher education colleges offer a two-year course covering the following components: firstly, subject content knowledge. This section covers acquiring knowledge and understanding of school subjects in the primary and secondary curriculum/syllabus. It is important for teachers to be conversant with the knowledge they will share with learners in schools.

The second component in the teacher education syllabus is curriculum content, which covers subject matter and pedagogic content knowledge, often known as methods courses. Key aspects of this content knowledge include approaches to teaching large classes, multi-grade strategies for small schools, language code switching, and how to plan lessons according to the social constructivist approach (UNESCO, VII, 2010/2011). The syllabuses for primary and secondary education have been reviewed in the spirit of the constructivist approach (United Republic of Tanzania 2005; Ministry of

Education and Culture, 2005). The reviewed syllabuses emphasize learner-centred methods of teaching and learning. The review also emphasizes a participatory approach to teaching which aims at benefiting children with different abilities (Hardman, 2009).

However, there has been a dilemma as to whether the focus of the curriculum should be on the subject matter (content) or pedagogy (methodology), or both. Research findings reveal that teachers are not well-trained and this leads to deterioration of education in the primary and secondary schools (Babygeya, 2006; Osaki 2000). As a result the curriculum emphasizes mastery of subject matter in order to improve trainees' academic qualifications. This role is supposed to be covered in the primary and secondary schools. The innovation has posed several challenges, including a shortage of qualified educators in terms of pedagogy and ineffective utilization of time. Meena (2009) investigated conceptions of curriculum innovation among teacher educators. The study results show that teacher educators seem to see more obstacles and limiting factors than new solutions.

Professional studies cover aspects of becoming a teacher that extend beyond the subject area and teaching methods. They cover, for example, how children learn and how cognitive, affective, psychomotor, and social development take place; knowledge and skills in classroom management and pastoral care; craft knowledge of effective techniques to promote learning; acquisition of professional identities as a teacher; awareness of relevant educational history, psychology, sociology, philosophy, legislation, responsibilities, etc. (Hardman, 2009). Such topics are significant with respect to locating children's learning of social aspects in the classroom and outside of school such as the home background and family status (Lewin, 2000). Currently, ongoing studies about quality education in Tanzania are being carried out through a doctoral programme offered by Åbo Akademi University in Finland. The studies cover areas of teacher education and secondary education (Chambulila, ongoing study; Jidamva, study in progress) and special education (Kapinga, ongoing study; Mnyanyi, study in progress).

Also, opportunities to practice teaching under the supervision of teachers and college tutors or some other form of educational practice are provided through teaching practice. The aim is to enable teacher trainees to integrate the insights and concepts derived from what is taught in college, with the contextual and situated knowledge of specific classrooms and pupils (Ministry of Education and Culture, 2001).

The outlined section of the teacher education curriculum should enable teacher trainees to cope with existing teaching and learning problems. However, challenges emanating within teacher education have been identified relating to funding, recruitment, retention, and the teacher education curriculum. The challenges relate to the low budget allocated to education, with teacher education not receiving sufficient development funds. As a consequence, physical infrastructures are falling apart mainly due to age and inadequate funding for maintenance and repairs (Hardman, 2009). Furthermore, because of low funding, which is not enough to purchase teaching and learning resources, effective training is not realized. Tutors are not offered systematic continuous professional development programmes to update their teaching knowledge and skills. Teacher professional development is in fact a continuous process even during the actual teaching period. Lack of teacher professional development is inconsistent with a statement stipulated in the Tanzanian Education and Training Policy which emphasizes that in-service training and re-training should be compulsory in order to ensure teacher quality and professionalism (United Republic of Tanzania, 1995, 2005).

It is a challenge to ensure that the teaching profession remains an attractive career attracting high quality applicants. Recruitment of qualified trainees into the teaching profession has been problematic in the teacher education department in Tanzania. In a review of teacher education in Tanzania, Hardman (2009) found that the academic level of the majority of trainees was weak, and many had only the minimal qualifications necessary for entrance. Thus, the trainees were unlikely to be competent and efficient after the completion of their teacher training course. Tanzania recruits primary school teachers from the bottom third or fourth pass rates of graduates in elementary secondary school examinations (Ministry of Education and Vocational Training, 2012). This is in contrast to developed countries, where teachers are selected from the top performance rates (The Economist, 2007). This presents a major challenge in terms of the effectiveness of teaching and learning process. Such teachers are unlikely to have secured grounding in core subjects for primary education, which is something that will contribute to poor pupil performance.

Furthermore, a substantial proportion of trainees entering teacher colleges in Tanzania see teaching as a career choice of last resort or as a transitory phase in a hunt for opportunities for further study (Towse, Kent, Osaki, & Kirua, 2002). Most of the trainees had failed "O"Level in key subjects and the effect can be seen in poor pupil performance. Spear, Gould, and Lee (2000) argue that teachers with a better knowledge of subject

material and greater written and verbal language proficiency have better-performance students.

With regard to secondary schools, a shortage of qualified teachers has resulted in the use of large numbers of professionally unqualified teachers. Due to the expansion of secondary education through the Secondary Education Development Plan (2004 – 2009), the government embarked on a three-month programme to train students who had completed “A” Level secondary and then provided them with a licence to teach in secondary schools, on condition that they would later pursue their Bachelor’s degree by distance learning through the Open University of Tanzania. The trainees who joined this scheme were those who had not qualified to join a university and thus they had resorted to joining the teaching profession.

Teacher education is further impaired by the flow of teachers who leave the profession before retirement. It is challenging to retain teachers in schools for various reasons. In part, teacher retention is affected by economic factors, as teachers decide to leave teaching and seek better paid jobs. According to the education statistics, almost 5% of primary school teachers who had left the teaching profession in 2010 did so because of obtaining better paid jobs. About one percent was removed from the teaching profession because of bad conduct. Leaving teaching is also exacerbated by teaching conditions which teachers find stressful due to the insufficient supply of textbooks and teaching materials, poor teaching and living accommodation, and high number of children in the classroom (Caillods, 2001). Dropout may increase due to some teachers considering teaching only a stepping stone. In a study by Towse et al (2002), one respondent claimed that teaching was the only job that would allow him to advance to the higher levels of education. After further studies some teachers would not return to teaching, and thus the profession was unintentionally promoting a flow of teachers out of it. Dropout has the effect on schools that it leaves in less capable teachers who might be demoralized by thinking that teaching is for less qualified teachers.

From the above discussion, challenges placed on teacher education are found in the classroom, at teacher training colleges and in the living environment, especially where there is a shortage of houses for the teachers. The challenges are also attributed to teachers’ academic qualifications. The following section describes challenges caused by global processes.

Globalization effects on teacher education – a conclusion

Globalization refers to the transfer, adaptation, and development of values, knowledge, technology, and behavioural norms across countries and societies in different parts of the world (Cheng, 2000). Dimmock and Walker (2005) argue that in a globalizing and internationalizing world, it is not only business and industry that are changing, but education, too, is caught up in that new order. Since this responsibility is within a nation and there is inequality in terms of economic level and perhaps in cultural variations in the world, globalization seems to affect others directly. This situation provides each nation with the challenge of how to respond to this new order. As a result, education systems of nation-states have undergone reform(s) as a response to the effects of globalization (Luijten-Lub, 2007). Tanzania is no exception in this endeavour.

Since 1995 when the Education and Training Policy was formulated in Tanzania, the education sector has undergone several reforms that were geared towards improving access, equity and quality, as well as capacity building (United Republic of Tanzania, 2004a). To achieve the goal, the government embarked on two huge education development plans – the Primary Education Development Plan (PEDP), which started to be implemented in 2002, and the Secondary Education Development Plan (SEDP), in 2004 (United Republic of Tanzania, 2001; URT, 2004b). The on-going reforms in primary and secondary education are running concurrently with innovations in teacher education.

PEDP covers the provision of primary education, as well as education for out-of-school children and youth, Complimentary Basic Education in Tanzania, COBET. PEDP is implemented in phases of five years, and the first phase started from 2002 through 2006. Implementation of the second phase covers another five years from 2007 to 2011. The targets of priority investment for PEDP include: *enrolment expansion*, focusing on classroom construction; teacher engagement and teacher deployment; *quality improvement*, encompassing in-service and pre-service teacher training and teaching and learning materials provision; and system-wide *management improvement* through a range of capacity building efforts (United Republic of Tanzania, 2001, 2007).

The targets of priority investment for SEDP include improvement of access – the initial aim was to reach 50% of the transition rate from primary to secondary education by 2010 through optimum utilization of teachers and expansion of school facilities, and supporting non-government Education statistics indicate that about 51% of grade seven pupils were selected

to join secondary education in 2011 (Ministry of Education and Vocational Training, 2011). Another area of implementation is equity improvement by allocating more resources in the education sector, improving the retention and performance of girls, improved provision of education to marginalized groups and reduction of fees for day students (Sekwao, 2004). Quality improvement aims to raise the student pass rate.

The challenges imposed by the reforms in the primary and secondary education sectors have necessitated innovations in teacher education. Teacher education innovations aim to increase the number of primary school teachers in responding to the increase of the enrolment rates. Furthermore, a number of innovations have been introduced in pre-service teacher training in an effort to respond to the PEDP implementation outcome. For example, the government had to embark on a two-tier system to prepare grade IIIA teachers, who usually teach in primary schools. The trainees had to be in colleges for one year and spend the second year in the field, where they were assisted by educational officers at the school and district level. Moreover, the professional development of teachers is addressed by providing in-service training in skills which involve pupil participation. The intention is to minimize the tendency of teachers to use methods that deny pupils the required-teacher pupil interaction.

The impact of the education reforms in primary and secondary schools is more noticeable in poor teaching and the learning environment in the schools. There is an acute shortage of teaching and learning resources, which compromises quality education. Briefly, the reforms called for increased resources which the country does not have due to its poor economic situation. The government has been forced to call for assistance from different partners in education.

Globalization includes the growth of global networking (e.g. the internet, worldwide e-communication, and transportation), global transfer and interflow in technological learning areas and the use of international standards and benchmarks (Makule, 2008). We therefore expect values, skills and knowledge acquired from a nation's education system to be globally relevant, but at the same time to be relevant for the growth of the nation's social and cultural identity. Certification in the levels of education described above depends solely on teacher education, which bears the responsibility of educating teachers, whose task it will be to certify and socialize a new generation into society. In Tanzania, certificates are provided for educational programmes as stipulated by the government. Also, certificates can be given for short courses, in-service training, workshops, seminars and experiential learning.

Use of certification focuses on the needs and different levels of education of a particular country and society. This is due to the fact that school systems differ from one country to another. For example, primary education in Tanzania is provided for seven years, compared to Norway, where primary education is offered for ten years. In this regard, a teaching certificate can be a difficult document to transfer. For certification to be accepted internationally, the process might require understanding of a nation's policy towards teaching certification and thus involve undergoing scrutiny and the protocol of the new nation.

Furthermore, standards for teaching are specific in that they articulate the actual knowledge and skills teachers in a country should know and be able to perform successfully. In this respect, reaching global understanding of 'the best pedagogy of teacher education' is faced with the challenge of determining best practices and selecting appropriate materials. It entails answering questions such as how to focus resources related to both content information and teaching strategies: are they consistent with the local, state, and national curriculum and assessment standards? In summary, it is difficult for a teacher educated in one nation, for instance, Norway, to be certified to teach in Tanzania.

Although international teacher certification seems difficult because of the values attached to the objectives of education in different societies, the impact of globalization is inevitable, although with different manifestations and translations. Tanzania has therefore to strive to improve its economy and hence improve the teaching and learning environment. In this regard, the country will be able to address challenges that the teacher education faces as well as the consequences of global trends. Since Tanzania will always be affected by global events taking place elsewhere in the world, teacher training and teacher professional development programmes must be organized to help to update and familiarize teachers with new developments in education in terms of pedagogy, theories, and content.

References

- Alcock, K. & Ngorosho, D. (2003). Learning to spell a regularly spelled language is not a trivial task – patterns of errors in Kiswahili. *Reading and Writing: An Interdisciplinary Journal*, 16(7), 635-666.
- Babyegeya, E. (2006). Teacher education in Tanzania: development and prospects. *Journal of Issues and Practice in Education*, 1(2), 32-46.
- Benson, J. (2005). A complete education? Observations about the state of primary education in Tanzania in 2005. *Hakielimu Working Paper Series*.
- Caillods, F. (2001). Financing secondary education in selected Francophone countries of Africa: Issues and perspectives. In *Financing Secondary Education in Developing Countries: Strategies for Sustainable Growth*. Paris: UNESCO, IIEP.
- Cheng, Y. C. (2000). A CMI- triplication paradigm for reforming education in the New Millennium. *International Journal of Educational Management*, 14(4), 156-176.
- Davidson, E. (2007). The pivotal of teacher motivation in Tanzanian education. *The Education Forum*, 71(2), 157-166.
- Dimmock, C. & Walker, A. (2005). *Educational leadership: culture and diversity*. London: Sage.
- Editor (2012). *Daily Newspaper*. Retrieved April 9, 2012, from [http:// www.daily-news.co.tz/editorial](http://www.daily-news.co.tz/editorial)
- Griffin, R. (2012). *Teacher Education in Sub-Saharan Africa: closer perspectives*. United Kingdom: Symposium Books Ltd.
- Hakielimu (2012). Education Sector Budget 2011/2012. *Is there any hope of improving education?* Hakielimu Brief 11:6E.
- Hardman, F. (2009). A review of teacher education in Tanzania and the potential for closer links between PRESET and INSET. *Ministry of Education and Vocational Training*. Dar-es-Salaam.
- International Fund for Agricultural Development (IFAD) (2011). *Enabling poor rural people to overcome poverty in the United Republic of Tanzania*. IFAD.
- Kalanje, S. E. (2011). *Identification of first graders at risk of reading and writing difficulties: Creating a group-based screening tool in Kiswahili in Tanzania*. (Doctoral dissertation, Åbo Akademi University.) Vasa: Åbo Akademi University.
- Kumburu, S. A. (2011). *The effectiveness of short-term literacy skills intervention on children at risk of reading and writing difficulties in Tanzania*. (Doctoral dissertation, Åbo Akademi University.) Vasa: Åbo Akademi University.
- Lewin, K. M. (2000). *Mapping science education in developing countries*. Washington, DC: The World Bank Human Development Network.

- Luijten-Lub, A. (2007). *Choices in Internationalization: How higher education institutions respond to Internationalization, Europeanization, and Globalization*. Zwolle: University of Twente.
- Lyytinen, H., Erskine, S., Kujala, J., Ojanen, E., & Richardson, U. (2009). In search of a science-based application: A learning tool for reading acquisition. *Scandinavian Journal of Psychology*, 50, 668-675.
- Makule, A. O. (2008). *Globalization and education: the changing role of school leadership in primary education in Tanzania*. Unpublished M.Phil thesis, University of Oslo, Norway.
- Malmberg, L. E. & Hansén, S-E. (1996). The educational system in Tanzania. In L. E. Malmberg (Ed.), *Initiation of teacher education project in Tanzania* (pp. 21-29). Report from the Faculty of Education, Åbo Akademi University, No. 1. Vasa: Pedagogiska Fakulteten vid Åbo Akademi.
- Mbelle, V. Y. (2008). The impact of reforms on the quality of primary education in Tanzania. Research on Poverty alleviation [REPOA], Research report 08.1.
- McGuinness, D. (2004). *Early Reading Instruction. What Science Really Tells Us about How to Teach Reading*. Cambridge, MA: MIT Press
- Meena, W. E. (2009). *Curriculum innovation in Teacher Education: Exploring conceptions among Tanzanian teacher educators*. (Doctoral dissertation, Åbo Akademi University.) Vasa: Åbo Akademi University.
- Ministry of Education and Culture (2001). *Teacher Education Master Plan (TEMP): Midterm Strategic and Programme Framework, 2000–2005*. Dar-es-Salaam.
- Ministry of Education and Culture (2005). *Education Sector Situation Analysis*. Dar-es-Salaam: Ministry of Education and Culture.
- Ministry of Education and Vocational Training (2007). *Teacher Development and Management Strategy (TDMS)*. Dar-es-Salaam.
- Ministry of Education and Vocational Training. (2009). *Primary school leaving examination results, 2009*. Dar-es-Salaam: Ministry of Education and Vocational Training.
- Ministry of Education and Vocational Training. (2011). *Basic Education Statistics in Tanzania, Regional Data*. Dar-es-Salaam: Ministry of Education and Vocational Training.
- Ministry of Education and Vocational Training. (2012). *Qualifications for Grade IIIA teacher training course*. Dar-es-Salaam: Ministry of Education and Vocational Training.
- Ministry of Finance (2011). *Government budget for the financial year 2011/2012*. Dar-es-Salaam: Ministry of Finance.
- Mtahabwa, L. & Rao, N. (2010). Pre-primary education in Tanzania: Observations from urban and rural classrooms. *International Journal of Educational Development*, 30, 227-235.

- National Bureau of Statistics (2010). *Tanzania national population survey: Projections by 2025*. Dar-es-Salaam: Ministry of Planning, Economy and Empowerment.
- Ngorosho, D. L. (2010). Key indicators of home environment for educational research in rural communities in Tanzania. *Child Indicators Research*, 3(3), 327-348; DOI 10.1007/s12187-009-9061-7.
- Ngorosho, D. L. (2011a). Reading and writing ability in relation to home environment: A study in primary education in rural Tanzania. *Child Indicators Research*, 4, 369-388.
- Ngorosho, D. L. (2011b). *Literacy skills of Kiswahili speaking children in rural Tanzania: The role of home environment*. (Doctoral dissertation, Åbo Akademi University.) Vasa: Åbo Akademi University.
- Ngorosho, D. L. & Lahtinen, U. (2010). The role of home environment in phonological awareness and reading and writing ability in Tanzanian primary school-children. *Education Enquiry*, 1(3), 215-238.
- Osaki, K. M. (2000). Curriculum and quality. In J. C. Galabawa, F. E. M. K Senkoro & A.F. Lwaitama (Eds.), *The Quality of Education in Tanzania* (pp. 225-250). Faculty of Education: IKR, Dar-es-Salaam.
- Sekwao, N. V. (2004). *National report on the development of education, 2001–2004*. Dar-es-Salaam. Ministry of Education and Vocational Training.
- Spear, M., Gould, K., & Lee, B. (2000). *Who should be a teacher? A review of factors motivating and demotivating prospective and practicing teachers*. Slough: National Foundation for Educational Research.
- The Economist (2007). How to be top. *The Economist*, October 2007.
- Towse, P., Kent, D., Osaki, F., & Kirua, N. (2002). Non-graduate teacher recruitment and retention: some factors affecting teacher effectiveness in Tanzania. *Teacher and Teacher Education*, 18, 637-652.
- UNESCO, VII (2010/2011). *World data on education, VII Ed.* 2010/2011.
- United Nations Development Plan (2011). *List of countries by percentage of population living in poverty*. UNDP, 2011.
- United Republic of Tanzania (URT) (1995). *Education and Training Policy in Tanzania*. Dar-es-Salaam: Ministry of Education and Culture.
- United Republic of Tanzania (1999). *The Tanzania Development Vision, 2025*. Dar-es-Salaam: Planning Commission.
- United Republic of Tanzania (2001). *Education sector development programme: Primary education development plan (2002–2006)*. Dar-es-Salaam: Ministry of Education and Culture.
- United Republic of Tanzania (2004a). *National report on the development of education 2001–2004*. A report submitted to the Forty-seventh session of the International Conference on Education, 8–11 September 2004, Geneva Switzerland.

- United Republic of Tanzania (2004b). *Education sector development programme: Secondary education development plan (2004–2009)*. Dar-es-Salaam: Ministry of Education and Culture.
- United Republic of Tanzania (URT) (2005). *Education and Training Policy in Tanzania* (revised edition). Dar-es-Salaam: Ministry of Education and Culture.
- United Republic of Tanzania (2005). *Muhtasari wa kufundishia somo la Kiswahili*. Dar-Es-Salaam: Wizara ya Elimu na Mafunzo ya Ufundi.
- United Republic of Tanzania (2006). *The development of education: National Report on the development of education 2005–2006*. Dar-es-Salaam: Ministry of education and Vocational Training,
- United Republic of Tanzania (2007). *Education Sector Development Programme: Primary education development plan (2007–2011)*. Dar-es-Salaam: Ministry of Education and Vocational Training.
- United Republic of Tanzania (2012). *The Economic Survey*. Retrieved April 9, 2012, from [http:// www.tanzania.go.tz/economicsurvey.html](http://www.tanzania.go.tz/economicsurvey.html)
- Wepukhulu, B. (2002). *Capacity building for lead teacher training institutions in Tanzania*. A report submitted to UNESCO Headquarters.
- Wikipedia, the Free Encyclopedia (2011). *Demographics of Tanzania*. Wikipedia, the Free Encyclopedia.
- World Bank (2012). Tanzania economic update: Stairways to Heaven. *The World Bank Africa Region Poverty Reduction & Economic Management, Issue 1*, February 2012.

Trends and Challenges in Teacher Education: National and International Perspectives

Keynote delivered by Marilyn Cochran-Smith, Boston College, USA

As we all know, teacher education is a major concern globally. Although my focus today is on the U.S. context, many of the challenges that face teacher education in the U.S. are also challenges in other nations. So I include some international comparisons, which audience members will interpret in light of their own knowledge and experience with the Norwegian and other contexts. I want to talk about six major trends and challenges in teacher education: (1) Unprecedented attention to teacher quality, (2) Shifting notions of accountability, (3) Meeting the needs of increasingly diverse school populations, (4) The mounting question about who should teach, Who should teach teachers? Where and how? (5) Emphasis on practice and clinical settings, and (6) Research as a priority in teacher education.

Key words: Challenges Facing Teacher Education, Quality, Accountability, Practice, Research

Trend I: Unprecedented attention to teacher quality

In many places around the world, there is unprecedented attention to teacher quality, primarily defined in terms of student achievement. Politicians, policymakers and researchers of all stripes now assume that teachers are a critical influence, if not the most important influence, on what, how, and how much students learn. As a result there are now extremely high expectations for teacher performance. Questions about how the nation's teachers are recruited, prepared and evaluated are now among the hottest

topics in educational policy and practice. In one sense, of course, this is good. It is high time that the value of teachers' work was acknowledged. However, when it is assumed that teacher quality determines school effectiveness, then teacher education becomes a policy problem to be solved by high level leaders in the business and policy worlds with the assumption that getting the right policies in place will drastically improve teacher quality and students' achievement.

The down side here is that treating teacher education as what I call "a policy problem" (Cochran-Smith & Fries, 2005) assumes that there is a more or less linear relationship from policy to teacher quality to students' achievement. The assumption is that these will automatically be improved when policymakers correctly manipulate the broad policy parameters governing teaching and teacher preparation. In the U.S., this means policies regulating coursework and licensing requirements for teachers, required college majors, teacher tests, and pathways into teaching. In Norway, this would include things like the lowest grade point average allowable for those who want to enter into teaching or the number of European transfer credits required for teacher candidates, and the required number of days of field practice, as well as qualifications for mentors.

These approaches are important. However, large-scale policies regarding teacher education generally do not account well for the contexts and cultures of schools, which vary widely, nor for how these cultures support or constrain teachers' ability to use the knowledge and resources they have. The policy approach also neglects teacher education understood as what I call "a learning problem, which has to do with local emphasis on teachers' knowledge, their thinking and interpretations, how they make decisions and develop as professions. From the learning perspective, the idea is that good teaching depends primarily on teachers' learning over time and on teachers' knowledge, skills, beliefs, attitudes and values. The current tendency in many places is to foreground policy regarding the preparation of teachers and to push to the background larger issues related to teachers' learning. I believe that the challenge in many places (Norway included, with its disappointing PISA results and the low number of teacher education applicants) is to find ways to address and to balance the policy issues while maintaining a focus on teachers' learning. This is a very difficult thing to do.

The second tension involved with unprecedented attention to teacher quality is a paradox that has been noted many times before. With many of today's policy discussions focused almost entirely on school issues, the assumption is that teachers are both saviors and culprits. Here's what I mean. The assumption is that teachers are the most intractable problem

educational policy makers must solve because, it is alleged, it is teachers' meagre knowledge and skills that are the cause of the failure of the schools in the first place. At the same time, however, it is also argued that teachers are the best solution to that problem because, it is assumed, improved teacher quality is the cure for all that ails the schools.

A recent U.S. report by a group called The Teaching Commission was chaired by the former chair of IBM. That report said:

Bolstering teacher quality is, of course, not the only challenge we face as we seek to strengthen public education... But the Teaching Commission believes that quality teachers are *the* [emphasis added] critical factor in helping young people overcome the damaging effects of poverty, lack of parental guidance, and other challenges... In other words, the effectiveness of any broader education reform... is ultimately dependent on the quality of teachers in classrooms. (2004, p. 14)

You may also be familiar with the 2005 OECD report titled "Teachers matter" which had a very similar theme in its discussion of teacher education in most European countries. Let me be clear here. As I already said, of course teachers matter. But here is my concern. Teachers and teacher education programs alone can't fix the worst schools and improve the life chances of the most disadvantaged students in any nation without simultaneous investment in resources, capacity building and enhancing teachers' professional growth, not to mention the need for changes in student's and families' access to housing, health and jobs. Acknowledging that the problem of a nation's schools include, but go far beyond teachers, and that the problems of a nation include, but go far beyond schools accepts the goals of equal and high quality education for all students, but rejects the idea that holding teachers and teacher educators accountable for everything will fix everything, without attention to other much larger problems.

The third challenge here has to do with the larger goals and purposes of education and whether the bottom line is the economy or our democracy. Nearly worldwide, and I think it is fair to say that this is true in Norway, it's now taken for granted that the health and robustness of the economy are tied to the quality of teachers and to the ways they are prepared and educated. This idea, informed by human capital theory, is that teachers are responsible for producing a labor force with the array of knowledge and skills needed to thrive in the new knowledge society, thus enabling the nation to compete in the global economy. A recent speech by President Obama (2009) illustrates this:

America will not remain true to its highest ideals – and America’s place as a global economic leader will be put at risk – unless we do a far better job than we’ve been doing of educating our sons and daughters; unless we give them the knowledge and skills they need in this new and changing world. For we know that economic progress and educational achievement have always gone hand in hand in America.

The point behind this kind of discourse is the economic need for an educated, and thus competitive work force, rather than the larger social need for everybody to have access to teacher quality as a fundamental human right in a democratic society.

The challenge for teacher education then, in many places, is to make sense of and respond to what often appear to be two competing agendas. To educate teachers who can teach all students to participate in a democratic society, on one hand, or to educate teachers who can teach all students to compete in a global economy, which may primarily benefit the elite. It’s not clear whether these can be thought of as complementary rather than competing agendas. This is a major challenge we face in teacher education.

Trend 2: Shifting notions of accountability

The second major challenge facing teacher education emerges from shifting notions of accountability with a focus on outcomes and quantification. In teacher education, changing notions of accountability have been referred to as a shift from inputs to outcomes in the U.S. Prior in the mid 1990s the emphasis in teacher education was not on outcomes. It was primarily on process – how prospective teachers learned to teach, how their beliefs, attitudes and identities as teachers changed over time, what contexts supported their learning, and what kinds of content, pedagogical and other knowledge they needed. The assessment of teacher education focused on what is now retrospectively referred to as inputs – institutional commitment, qualifications of the faculty, the contents and structures of courses and fieldwork experiences, and the alignment of all of these with professional knowledge and standards. The shift in teacher education from inputs to outcomes was part of a larger set of changes in how we think about educational accountability. Some people ask, so what’s the problem with accountability? My answer is simple – nothing and everything.

The problem is not accountability itself, but the fact that increasingly we are dealing with reductionist views of teaching and learning. The account-

ability bottom line – higher scores on literacy and numeracy tests – is increasingly the singular focus of too many discussions about the impact and improvement of teacher education. Increasingly, teacher quality and students' learning are equated with high stakes test scores. It is this simplistic equating that is problematic, rather than a larger notion of accountability itself.

Anne Lamott's (1994), *Bird By Bird*, a book about writing and life is helpful here. In one chapter, Lamott advises writers to avoid simple oppositions in the development of plot and characters. She says:

I used to think that paired opposites were a given, that love was the opposite of hate, right the opposite of wrong, but now I think we sometimes buy into these concepts because it is so much easier to embrace absolutes than to suffer reality. Now I don't think anything is the opposite of love. Reality is unforgivingly complex.

Lamott tells writers to embrace the complexity of real life and write about its biggest questions. I think this message aligns to our work in teacher education. *Teaching is unforgivingly complex*. It's not simply good or bad, right or wrong, working or failing, well or poorly planned. Dichotomies like these are popular in the headlines but limited in their usefulness. A major challenge for teacher education reform in many places, including Norway, is to embrace the complexity of teaching and learning even in the age of accountability and standardization.

My last point here in relation to shifting notions of accountability is that the heavy emphasis on outcomes has brought with it increasing monitoring of students' progress and increased evaluation of teachers performance. In some countries, like Norway, this is playing out in form of frequent reports and whitepapers about the state of teacher education and very close attention to PISA and other international test scores.

In the U.S., this is playing out in the form of value-added assessments of teacher preparation programs and pathways. Value-added assessments evaluate teacher education programs in terms of how much value they add to the achievement growth of the students of the teachers prepared in those programs. As is well known, value-added assessments are statistical procedures for estimating school and teacher effectiveness using student level test score records from year to year. Teachers are usually divided into quartiles from top to bottom in terms of how much value they add to their students' test scores. For example, in August, 2010 the Los Angeles Times newspaper commissioned a study using data from the Los Angeles unified school district to calculate value added estimates for nearly 6000 elementary

school teachers. The results of the LA study were debuted with this headline: Grading the teachers. Who's teaching LA's kids? A Times analysis using data largely ignored by Los Angeles Unified School District, looks at which educators help students learn, and which hold them back."

A picture of a teacher and his students had this caption: : "Over seven years John Smith's fifth graders have started out slightly ahead of those just down the hall but by year's end have been far behind". As you can imagine, this story prompted a huge variety of responses all over the country, both enormously negative and enormously positive, including some talk of a boycott of the LA Times by the Teachers Union (which did not occur). A group of key American education scholars (Baker, Barton et. al., 2010) issued a report about the uses of value added assessment, published by the Economic Policy Institute. Their report said there was broad agreement among researchers and economists that student test scores alone were not sufficiently reliable indicators of teacher effectiveness to be used in high stakes personnel decisions, even when sophisticated statistical applications such as value added modeling were applied.

In September, 2011, the U.S. Department of Education (2011) announced the Obama administration's plan for the reform and improvement of teacher education. The report concluded that too many teacher preparation programs are not up to the job of preparing teachers. The report said that teacher education's major problem was a lack of data that would tell programs how effective their graduates are after they leave their programs. The Obama plan calls for states to report on the aggregated learning outcomes of K-12 students taught by graduates of each preparation program, and there is now federal funding for states to develop these tracking systems.

Trend 3: Meeting the needs of the increasingly diverse student population

The third trend takes us in a different direction – preparing teachers to meet the needs of the increasingly diverse school population, which in many nations involves growing disparities in the school opportunities and outcomes of minority and majority groups. This challenge is complex and far-reaching, although I have time here to take up only a few of the important issues involved.

In many nations there is increasing diversity in the school population due to changing demographic patterns and increasing recognition of the chal-

allenges post by diversity. This is not true in every country, but in many. For example, although the situation has changed in some countries since the global economic recession that began in 2008, many nations have experienced major changes in migration flow over the last two decades, with the result that in a number of countries the total number of people entering the country far exceeds the number leaving. Countries in this category include, but are not limited to, the United States, Canada, England, Scotland, Ireland (prior to 2008), most of the countries in western and northern Europe, Australia, New Zealand, and Singapore. In addition, in countries like Norway, Finland and Sweden, the number entering also exceeds the number leaving the country, although in not as great numbers as some other countries.

U.S.

In the U.S., the racial and ethnic characteristics of the school population have changed dramatically over the last several decades from 78% white and 22% students of color in 1972 to 58% white and 42% student of color in 2004. Here, “white” means primarily Americans whose ancestry is European, while “students of color” includes African Americans, Asians, Hispanics, and indigenous Native Americans. Demographers predict that by 2035, the majority of school students in the U.S. will be from these minority groups. In addition, in U.S. schools, the number of English language learners increased from one and a half million to 5.3 million in just a 20 year period, with Asians and Hispanics today’s fastest growing immigrant groups (and these number growing rapidly). Further, the number of students with disabilities who receive special education services in schools has also increased (National Center for Education Statistics, 2003, 2009, 2010a,b).

Interestingly even in countries that were long considered homogeneous in language, ethnicity and culture, the situation has changed in many places. For example when I gave a talk in Japan recently, I was very interested to learn that there is an increasing number of students in the schools, especially the primary schools, with limited Japanese language skill. In Ireland 10% of primary and 12% of post primary students now come from an immigrant background, and the number is increasing dramatically over the last decade. Seventy to seventy-five % of these students don’t speak English as a first language, but English is the language of instruction.

In Norway, as you all know better than I, the population increased by 1.3% in 2011, its highest annual population growth ever and the third

highest overall growth percentage in Europe, with many newcomers from Poland, Lithuania, and other European countries. Globally these new population patterns have heightened awareness of the challenges posed by diversity and, in many cases, the inequities in achievement and other school related outcomes that persist between minority and majority groups.

I want to make it clear here that the challenge for teacher education is not diversity itself but how to focus on diversity by emphasizing assets, not deficits, or, as Gloria Ladson-Billings (2006) once put it, focusing on diversity, not perversity. In the U.S., while the student population has become increasingly diverse, the teacher population has continued to be primarily white European American. In the U.S., we know from years of research that unless they have powerful teacher education experiences that help them do otherwise and unless they have ongoing support, many white middle class teachers understand diversity as a deficit and tend to have lower expectations for minority students. Teacher educators in many countries are working to prepare teachers to help close gaps in achievement and address disparities in other outcomes.

Again, in the U.S. for example white and Asian American students score significantly higher than their Black and Hispanic counterparts on standardized reading and math tests. At the same time there are significantly larger percentages of Black, Hispanic and Native American students who drop out of school than White or Asian students. And there are similar patterns elsewhere. In Japan, there are now achievement gaps between inherited social class groups. In New Zealand the schools don't produce comparable achievement results for their Maori students in comparison with students of European descent. In Ireland students from immigrant groups, from socially disadvantage backgrounds, or from the Traveler community are most likely to fail.

In teacher education in many nations then, we are faced with the challenge of preparing teachers to help close achievement gaps and other disparities in opportunities and outcomes through coursework, community experiences and clinical experiences. The intention is that these will help teacher candidates develop cultural competence, establish caring relationships with students, and work respectfully with families and communities. Teacher candidates also need to learn how to work with language learners and students with special needs. Along these lines, some teacher education programs, including some here in Norway, now require field experiences in diverse or international settings to emphasize diversity and global citizenship.

Trend 4: Questions about who should teach, who should teach teachers, where and how

The fourth big issue facing teacher education has to do with mounting questions about who should teach, who should teach teachers, where and how. In many places these questions are part of challenges to the role of colleges and universities as the primary provider of teacher preparation. In the U.S., these questions are very visible in debates about so-called “alternate routes” into teacher education and in the proliferation of new teacher education providers that target different populations. The language of “alternate” and “traditional” pathways into teaching is used very inconsistently. However, much of the time, the language of “alternate” routes is used to refer to entry pathways into teaching that are greatly streamlined, including some that bypass colleges and universities altogether. In the U.S. alternate routes exist in nearly every state now and produce roughly 30% of the nation’s teachers, although this number varies depending on whose figures are used. “Alternate” route programs differ dramatically from one another and from college and university programs in terms of quality, format, and whom they target as prospective teachers. For example, Teach for America (TFA), the best known of the “alternate” certification programs, recruits recent college graduates from top institutions who complete a six week training session prior to their placement in high needs schools and then participate in professional development throughout their two year commitment. In Urban Teacher Residency programs, many of which are school-district rather than college or university initiated, the target is finding teachers in shortage areas, such as science, math, special education, and/or working with English language learners. Candidates complete a master’s degree through the auspices of a partner university while working for a full year in classrooms alongside teacher-mentors. In the US and some other places, there are also for-profits, like the University of Phoenix, and completely on-line teacher programs, like the American Board for the Certification of Teachers (ABCTE), which is a test-only on-line program. Now approved as a route to teacher certification in ten states, the test targets career changers who want a fast “cost effective” certification route.

New providers of teacher education are not unique to the U.S. Teach first, which is modelled after TFA and supported by the business in corporate worlds is a thriving program in England. In 2007 TFA and Teach First launched teach for all to support entrepreneurs who are building local TFA type programs in Germany, Estonia, Israel, China, New Zealand and other places. Teach First Norway, supported by Statoil, prepares science and math

teachers for selected secondary schools in Oslo beginning with two weeks of intense training in the UK. There are lots of issues here. They are applied differently to different places and I want to mention just one of these.

Behind some of the questions about who should teach teachers – particularly in school-based programs – is the intention to tighten the alignment between teacher preparation and school standards, curriculum, procedures, and assessments. Even though teacher education certainly needs to be closely linked and attentive to what is going on in schools, there are issues here. For example, tight alignment of teacher preparation with school procedures and testing programs undermines the historical and essential role of the university to critique the current system. It has long been part of the university's responsibility in democratic societies to raise questions about school practices and labels and to challenge aspects of curriculum and teaching that reinforce inequities.

Trend 5: Growing emphasis on practice and clinical settings

The fifth trend in teacher education is growing emphasis on practice and clinical settings. This has to do with competing conceptions of professionalism and competing ideas about what it means and what it takes to be a good teacher. First, we all know that many new teachers struggle during their first year, or even first years of teaching. In fact most new teachers struggle according to many research studies and many experienced teachers look back on their first year as far from ideal. New teachers struggle with the practicalities of managing a classroom, with competing demands, multiple tests, and often with their realization that their own expectations for teaching don't match the reality of the work. Clearly this raises a lot of questions. How do we understand the struggle of most new teachers? If we did a better job, integrating and connecting coursework with field praxis would it be less struggle and more affecting teaching. Is the answer better alignment, with school curricula and assessments, as I was just suggesting? Is the answer better prepared mentors and better mentoring during the teacher education and the first years of teaching? Or is the answer not asking brand new teachers to take on full responsibility for students the minute they begin to job.

Unfortunately, some approaches, like the Obama administration plan for improving teacher education, mentioned a moment ago, identifies the problem of a gap between teacher education and the real world of the classroom not as part of the reality of learning to teach but as evidence that

teacher education is not up to the task because it does not produce immediately classroom-ready teachers. In response to this concern in the U.S. one increasingly popular conception of the successful teacher is the person who implements a number of specific teaching techniques such as the 49 techniques in the very popular bestselling program called *Teach Like a Champion*. This program has gained attention because of its single-minded focus on the practical aspects of teaching and on techniques and tips. Along other related but also different lines, in some quarters, there is a growing belief that the way to improve teacher education is by making practice the center of professional preparation and moving away from colleges and universities. There have been direct questions about the value of university-based teacher education where the focus is perceived to be theoretical. U.S. Secretary of Education, Arne Duncan (2009), for example has said many times that education schools are “heavy on educational theory and light on developing core area knowledge and clinical training.”

A key challenge for teacher education is to make clear why and how attention to values and beliefs and theories are important and to debunk the now age-old but wrong-headed dichotomy between theory and practice. I think that we as teacher educators need to make it clear that the concept of practice includes what teachers do, and when, how and under what circumstances, but it also includes why and how teachers think about what they're doing, how they invent and reinvent frameworks for understanding their work, and how they co-construct curriculum with students. In teacher education, then, a central challenge is to help outsiders understand that practitioners theorize all the time, negotiating between the immediacy of daily decisions and particular events and much larger questions.

Trend 6: The emergence of research as a priority

The sixth and final trend in teacher education is the emergence of research as a priority. Given the limited time here – and the graduate student seminar on research in TE that I'm leading tomorrow – I'll just quickly mention a few key issues here. Research in and on teacher education is certainly not new. But new and continuing research agendas in teacher education are getting major attention these days internationally. There is a new priority on teacher education research. I think, this isn't surprising given the emphasis on teacher quality that I talked about at the beginning of this presentation along with interest at the highest levels of policy and practice in how a nation's teachers are prepared. For example, I am currently working with

my colleague, Ana Maria Villegas, on a chapter for the Fifth Handbook of Research on Teaching that deals with teacher preparation research. What we are finding is that there are many major topics of research that reflect the policy, political, and demographic trends I have been describing so far. We have currently identified more than 2000 empirical studies on pre-professional teacher education published between 2000 and 2011 in English language journals. We are now in the process of categorizing and critiquing these.

A second major aspect of the research trend in teacher education is the emphasis on teacher educators as researchers. In the U.S. and some other nations, teacher educators at colleges and universities are increasingly expected to be both skillful and wise practitioners and at the same time competent researchers who develop original research agendas that contribute to the larger field. This has created a world of new possibilities but also some conflicts. For example, in some US institutions (particularly research institutions), this has contributed to a situation where there are really two teacher education faculties – one, full-time tenure-track faculty, who teach courses and engage in research, often classroom-based, and then another clinical faculty, often part-time, adjunct, or doctoral students, who also teach courses, but primarily work with student teachers in the field, mentoring, supervising, and evaluating practice. In New Zealand, all of the teachers colleges, where the faculty were highly experienced teachers with master's degrees but not PhD holders, have amalgamated with university education departments over the last 6 years. Many teacher educators there have now earned PhDs, but there has also been a two faculties problem – a first and a second tier group – and the struggle of highly experienced and older new PhDs to demonstrate an acceptable level of research productivity. In Ireland, where teacher education will become a 4 year, rather than 3 year bachelor's program starting next year, there is mounting pressure for teacher educators, many of whom are highly experienced teachers without PhDs to complete the terminal degree. Here in Norway, there are also issues along these lines with the Ministry's 2009 White Paper on teacher education stipulating that teacher educators must be researchers or must be in close contact with researchers who conduct relevant research for teacher education.

This brings me to a third point. The push for teacher education to be research and evidence based. This is clearly an international trend, which is reflected here in Norway in the establishment of NAFOL National Research School in Teacher Education, whose agenda is to develop a national research and evidence-based body of knowledge in teacher education.

There are many issues related to the idea of teacher education as research-based, and people often mean different things when they use this phrase. Sometimes, and this applies in particular to ministries and departments of education, the demand is for teacher education to be research-based in the sense of teaching prospective teachers research-proven instructional techniques and strategies or for teacher education to show, using research evidence, that it prepares teacher candidates who have a demonstrable impact on the achievement of their eventual students. In contrast, some people use the term “research-based” to refer to teacher education’s knowledge base in the key domains that are relevant to learning to teach – domains such as how people learn, content-specific pedagogies, assessment strategies. From this perspective, being research-based means ensuring that teacher candidates have an opportunity to learn in all of these domains. In further contrast, some people talk about teacher education (and teaching) as activities that inherently involve research processes. They talk about research as a stance on teaching and teacher education wherein teachers continuously pose questions, collect the data of practice, and interpret these data in order to improve their own practice and share their knowledge in local and broader communities. Part of what’s involved with this last point, then, is figuring out what people are talking about when they use the terms “research-based” and “evidence-based” since many debates along these lines work at cross-purposes.

Conclusion

I have now come full circle. Teacher education is demanding work. We face many challenges, including these six that I’ve talked about today. Teacher education is demanding work. It demands that we are both excellent practitioners and excellent theorizers and researchers. It demands that we make local policy that accounts for local needs and issues, but it also demands that we are informed by deep understandings of larger – even global – political, economic and social issues. In conclusion, I want to emphasize the connection of the global to the local, as I tried to do with some of my examples.

Globally I believe that teacher education – particularly university teacher education – is at a cross roads. In the U.S., I think the crossroads is about whether university-based teacher education will even continue to exist as we know it in the next couple of decades. In Norway there are many rapid changes, either already underway or on the table for teacher education. There is mounting pressure for students to perform at higher levels on inter-

national assessments, and there is a shortage of academically-able people who are interested in teaching. I think then, that here in Norway, there is perhaps a different kind of crossroads and a different kind of opportunity to rethink teacher education over the lifespan and to re-conceptualize the role of teachers and teacher educators in the future of democratic societies in this global era.

References

- Baker, E., Barton, P., Darling-Hammond, L., Haertel, E., Ladd, H., Linn, R., & Shepard, L. (2010). *Problems with the use of student test scores to evaluate teachers*. Washington, DC: Economic Policy Institute.
- Cochran-Smith, M. & Fries, K. (2005). Researching teacher education in changing times: Paradigms and politics. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, N.J.: Lawrence Erlbaum Associate.
- Duncan, A. (2009). *Teacher preparation: Reforming the uncertain profession*. Speech delivered at Teachers College, Columbia University on 22 October, 2009. Retrieved October 25, 2012, from <http://www.ed.gov/news/speeches/teacher-preparation-reforming-uncertain-profession>
- Ladson-Billings, G. J. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Education Researcher*, 35(7), 3-12.
- Lamott, A. (1994). *Bird by Bird, Some Instructions on Writing and Life*. New York: Anchor Books.
- National Center for Education Statistics. (2003). Status and trends in the education of Hispanics (Publication No: NCES 2003-008). Retrieved October 25, 2012, from <http://nces.ed.gov/pubs2003/2003008.pdf>
- National Center for Education Statistics. (2009). Number and percentage distribution of 3- to 21- year olds served under the Individuals with Disabilities Education Act (IDEA), Part B, and number served as a percentage of total public school enrollment, by type of disability: Selected school years, 1976–77 through 2007–08.
- National Center for Education Statistics. (2010a). Racial/ethnic enrollment in public schools: Indicator 4.
- National Center for Education Statistics. (2010b). The condition of education 2010. (Publication No: NCES 2010-028). Retrieved October 25, 2012, from <http://nces.ed.gov/fastfacts/display.asp?id=96>.
- Obama, B. (2009, March 10). Taking on education. Speech presented at the US Hispanic Chamber of Commerce, Washington, DC.

Organisation for Economic Co-operation and Development, OECD (2005).

Teachers matter: Attracting, developing and retaining effective teachers. Paris:

Author.

The Teaching Commission (2004). *Teaching at risk: A call to action.* New York:

Author.

US Department of Education. (2011, September). *Our future, our teachers: The*

Obama Administration's plan for teacher education reform and improvement.

Retrieved March 3, 2012, from <https://www.ed.gov/teaching/our-future-our-teachers>

Part 3

This article has been subject to blind review.

Motivational, Personal and Cognitive Prerequisites of Pre-service Teacher Candidates

– A Systematic Analysis of Application Documents

Franziska Frost, Tina Seidel & Manfred Prenzel
TUM School of Education, Technische Universität München,
Germany

Admissions procedures to teacher education programmes are traditionally dominated by cognitive criteria. Until now, there is little knowledge about how to use alternative, profession-relevant non-cognitive criteria in the context of university admissions procedures. This study investigates the prerequisites of pre-service teacher candidates by systematic analyses of application documents: Content analyses of letters of motivation give information on study motives. Curricula vitae are used to assess previous experiences in pedagogical fields and final school grades serve as cognitive criteria. A descriptive overview of the prerequisites of a complete cohort (N = 238; winter term 2011/12) of pre-service teacher candidates is given. Cluster analysis reveals five distinct groups with excellent to critical prerequisites for the teacher profession.

Key words: Teacher Education Admission Procedure, Profession relevant Non-Cognitive Criteria, Cluster Analysis

I. Introduction

Student selection has internationally become a very topical theme in the tertiary education sector. This development is caused by greater numbers of students and a growing competition between universities to attract the

best candidates. Student selection for teacher training programmes inherits a further relevance: “teachers make a difference” (Wright, Horn & Sanders, 1997, p. 57) in students’ learning. Teacher effects are revealed as the most dominant factor in student gain (ibid.). As the teacher’s personality is considered to be changeable only to a limited extent (Mayr, 2011), selecting the right people for teacher training programmes is a highly responsible task.

The topic of student selection is treated in various ways across different countries, universities and faculties. However, there is a common trend towards the diversification of admissions requirements and criteria (Heine et al., 2006). Standardized test scores and high school achievements, especially scholastic assessment test (SAT) scores and high school grade point averages (HSGPAs), are traditionally used for college admissions (Schmitt, 2012; Schmitt et al., 2009). For example, in Germany HSGPAs are used in 81.4 % of German higher education institutions. It is the most commonly used admissions criterion (Spiel, Litzemberger & Haiden, 2006). Only recently, the inclusion of non-cognitive factors “to provide a more holistic view of student potential” (Schmitt, 2012, p. 18) is growing. However, there is a lack of valid instruments which allow adequate student selection (Tara-zona, 2006). Compared to other professional fields such as medicine, there is little research on admissions to teacher education programmes (Smith & Pratt, 1996). Consequently, there is no agreement among practitioners and researchers about relevant criteria and their measurement.

In order to find out more about admissions to teaching, the TUM School of Education (*Technische Universität München*, Germany) established a research project to evaluate various aspects, including selection interviews, of its admissions procedure to the teacher training programme. In contrast to earlier research, we focus on a complete cohort of potential student teachers. This sub-study focuses on pre-service teacher candidates’ cognitive and non-cognitive prerequisites and forms the basis for further research on the students’ development during their studies. Our approach is a systematic analysis of application documents of a complete cohort ($N = 238$) of pre-service teacher candidates. Although many universities demand extensive application dossiers, their use as predictors of study and vocational success has hardly been investigated. Our research questions are: (1) What information can be gained from systematic analyses of pre-service teacher candidates’ application documents? (2) Which clusters of pre-service teacher candidates’ prerequisites can be identified based on this information?

2. Theoretical framework

2.1 *Aptitude testing for teacher education programmes*

There are two different research paradigms which serve as a basis of argumentation for selective access and the consideration of non-cognitive criteria in admissions to teacher education programmes.

Firstly, there is a body of research on the *teaching personality* which gives evidence for the significance of stable personality traits for (a) teaching quality, and (b) teachers' health. Studies on the teacher's personality are often based on McCrae and Costa's (1987) five-factor model (FFM) of personality. Although there are several studies which report positive interrelations between the quality of teaching and several facets of the FFM (e.g. Emmerich, Rock & Tarpani, 2006), the findings are often contradictory. Findings on teachers' health are more obvious. Compared to other professional groups, teachers show striking tendencies to burn-out (Schaarschmidt, 2007). This indicates a misfit between the profession's high requirements and the suitability of some teachers. Many studies report positive correlations between neuroticism and burnout (e.g. Foerster, 2006; Kokkinos, 2007) as well as neuroticism and teachers' lack of job satisfaction (e.g. Urban, 1992). In contrast, extraversion has a positive impact on both variables (Lipowsky, 2003; Mayr & Neuweg, 2006). As personality characteristics turned out to be relatively stable (Mayr, 2011; Roberts & DelVecchio, 2000), it is striking that Schaarschmidt (2004) revealed unfavourable personality patterns for 40 % of pre-service teachers. Aptitude testing before study entry could prevent unsuitable persons from entering the profession and foster suitable persons to become teachers.

Secondly, research on the *professional development of teachers* argues that teachers' learning processes are fostered or impeded by more or less favourable prerequisites. The so-called integrative perspective on teacher development (e.g. Kunter et al., 2011; Mayr, 2010) emphasizes that individual prerequisites such as cognitive, motivational and personal factors moderate the way in which learning opportunities are noticed and utilized. This accounts for both academic and practical contexts. In summary, teacher education programmes are more or less efficient depending on the students' prerequisites. As a consequence, some researchers and practitioners claim that if developmental needs seem to be unbridgeable, the admission to teacher education should be questioned.

2.2 Why school grades are insufficient as admissions criteria for teacher training programmes

Until now, the admissions procedures to most study programmes are dominated by cognitive criteria. Usually, the candidates' high school grade point average (HSGPA) is used as the single criterion or it is combined with other criteria (Heine et al., 2006). Such cognitive measures can be applied objectively and efficiently to a large number of college applicants and allow comparability across students with varying educational backgrounds (Schmitt et al., 2009). Its application is well accepted. HSGPAs correlate comparatively well with academic grades (e.g. $r = .41$; Robbins et al., 2004) and currently constitute the best predictor for study success (Gold & Souvignier, 2005; Rindermann & Oubaid, 1999). However, as substantial parts of variance remain unexplained, their use as an exclusive admission criterion is questioned (Stemler, 2012). Furthermore, academic grades do not correlate very well with other aspects of academic success (e.g. student satisfaction, engagement or study duration) or job performance (Cappelli, 1991). On the basis of statistical simulation studies, Müller-Benedict (2010) argues that the accuracy with which school grades are used for allocating university places does not relate to its expressiveness.

Beyond this rather general criticism, the transferability of common findings in research on aptitude testing to the teacher domain is questioned for two reasons (Blömeke, 2009). Firstly, teacher training programmes are comparably heterogeneous (ibid.). Besides two or more different subjects, the programme also includes didactic and educational-psychological content as well as practical phases. This explains why correlations between HSGPAs and final university examinations were much weaker in a sample of mathematics teachers ($r = .23$) compared to a sample of diploma mathematicians (corresponds to the Master's degree; $r = .43$; ibid.). Secondly, as the teacher profession is a well-defined occupation and the vocational demands are known, it is improper to consider only academic success criteria within admissions procedures. Apart from that, school grades revealed as insufficient in predicting teachers' self-reported occupational success (Mayr, 2010). In summary, the usage of school grades as the single admissions criterion for teacher training programmes seems unsatisfactory.

2.3 *Alternative criteria relevant for academic success*

Whereas a large amount of earlier research assumed that student achievement depends on general cognitive ability (Sternberg & Grigorenko, 2002), recent studies show that measuring a broader range of abilities accounts for more incremental variance (e.g. Stemler, 2012). Current studies highlight the benefits of non-cognitive predictors. Crede and Kuncel's (2008) meta-analysis, for example, revealed study habits and skill measures to be strong predictors of academic success. However, personality traits and motivational aspects still play a minor role in research on aptitude testing (Blömeke, 2009). Stemler (2012, p. 12) points out that

[...] despite the promise of these new and broader measures of ability, none are yet sufficiently refined for administration at the large-scale level of hundreds of thousands of students, and evaluating further data on their utility at this scale is advisable.

Until now, there has been no consensus about which prerequisites pre-service teacher candidates should have before study entry. The choice of predictors depends largely on the criteria to be predicted. Objective success criteria (e.g. academic grades) can best be predicted by cognitive indicators (e.g. HSGPAs), whereas subjective success criteria (e.g. student satisfaction or job satisfaction) can best be predicted by psychological and motivational predictors (Blömeke, 2009). Based on theoretical knowledge and empirical findings, Blömeke (2009) suggests using three bundles of admissions criteria – including subjective and objective predictors – in order to predict teachers' study and occupational success reliably: these are *cognitive criteria*, *motivational criteria* and *person-related criteria*. This classification is supported by German nationwide educational standards (Kultusministerkonferenz, KMK, 2004) and Kunter and colleagues' (2011) model of professional development.

In the following, we rely on the three bundles *cognitive*, *motivational* and *personal prerequisites* as potential dimensions for admissions procedures in the teacher domain. The next sections summarize empirical findings on the predictive validity of these dimensions for various academic and occupational success indicators. The findings are reported either from general working contexts or, if available, from teacher research.

Cognitive prerequisites. Scholars widely agree on considering cognitive ability as a necessary condition for both academic and occupational achievements. Numerous national and international empirical studies have

confirmed good to excellent validities of school grades in predicting academic grades (Robbins et al., 2004; Trapmann, 2008). Apart from school grades, Trapmann (2008) found significant interrelations between cognitive achievement tests and academic grade criteria, study duration as well as the non-cognitive criterion satisfaction with stress coping. A meta-analysis by Gottfredson (2003) revealed the factor general cognitive ability (g) to be the best predictor for job performance. Performance predictions based on general cognitive ability turned out to be more reliable than predictions based on specific skills and abilities (ibid.). Overall, the importance of cognitive criteria is considered verified for various academic and occupational achievement criteria.

Motivational prerequisites. Current research on students' achievements highlights "the contribution of both motivational and cognitive factors for student academic success" (Linnenbrink & Pintrich, 2002). Researchers' understanding of student motivation has changed from a single global construct to a multifaceted one. According to Linnenbrink and Pintrich (2002), the four motivation facets self-efficacy beliefs, adaptive attributions, intrinsic motivation and adaptive goal orientation are most relevant to learning in academic and other contexts. There are numerous empirical studies which underline the relation between students' motivation and their achievements. Blömeke (2009), for example, found significant negative correlations between mathematics teachers' interest in mathematics and their study duration ($r = -.11$) as well as their intention to dropout ($r = -.17$), but positive correlations concerning the teachers' job satisfaction ($r = .16$). Subject-specific study motivation reduces the intention to dropout ($r = -.18$) and stress experience ($r = -.13$) and fosters students' results in terms of university exit exams ($r = -.23^1$). Regression analyses by Fellenberg and Hannover (2006) revealed subject-specific interest to be the strongest predictor for the intention to abort studies ($\beta = -.43$). In a meta-analysis, Credé and Kuncel (2008) identified study motivation as a strong predictor ($p = .39$) of freshman GPAs. Furthermore, study motivation showed incremental validity over HSGPAs in predicting academic performance.

Especially in teacher research, a qualitative differentiation of motivational aspects, e.g. intrinsic versus extrinsic motivation, is reasonable. There are a variety of studies which describe teacher aspirants' study motives (e.g. Pohlmann & Möller, 2010; Retelsdorf & Möller, 2012; Rothland,

¹ In the German educational system high grades are classified as good achievements, whereas low grades mean poor achievements. For this reason the cited interrelation is negative.

2011). However, there has been little research investigating the relationship between teacher aspirants' study motives and performance-related criteria. The few existing studies reveal contradictory results. Albisser, Kirchoff and Albisser (2009) did not find correlations between teachers' vocational motivation and their experience of stress. Künsting and Lipowsky (2011) found intrinsic motivation to predict student teachers' self-reported strategy use ($\beta = .34$) and their satisfaction with the study programme ($\beta = .49$), whereas extrinsic motivation did not correlate significantly with these criteria. Concerning occupational success, the predictor achievement motivation is considered to be essential to occupational success (Amelang & Schmidt-Atzert, 2006). In sum, there is strong empirical evidence which attests medium correlations between motivational criteria and academic and vocational outcomes.

Personal prerequisites. Research on the teaching profession as well as theories from work and organizational psychology stress the role of personality traits besides cognitive and motivational characteristics in predicting teachers' occupational success (Blömeke, 2009). As personality characteristics are considered to be relatively stable (Mayr, 2011; Roberts & DelVecchio, 2000), their relevance for aptitude testing is obvious.

Künsting and Lipowsky (2011) showed that conscientiousness predicts student teachers' satisfaction with their study programme ($\beta = .13$) and their use of strategies ($\beta = .47$) significantly. In contrast, neuroticism turned out to have a negative effect on student satisfaction ($\beta = -.26$) and no significant interrelation with use of strategies. Among other criteria, Fellenberg and Hannover (2006) investigated first year students' general and subject-related self-concept and found strong correlations with their intention to dropout ($r = -.22$; $r = -.39$). In a subsample of $N = 130$ students of MINT subjects, these interrelations were even higher ($r = -.31$; $r = -.48$).

The personality trait instrumentality showed clear effects on both various academic (final university examinations: $r = -.15$; intentions to dropout: $r = -.11$; stress experience: $r = -.19$) and self-reported occupational success criteria (adequate job position: $r = .11$; job satisfaction: $r = .15$; Blömeke, 2009) in a mathematics teachers sample. Fairly similar but generally weaker correlations were found concerning the personality trait expressiveness. Keller-Schneider (2009) identified six beginning teachers' profiles based on the Big Five personality traits. Within these profiles, extraversion and neuroticism were meaningful predictors of coping with occupational stress. A retrospective survey by Mayr (2007) revealed extraversion, conscientiousness and partly openness as suitable long-term predictors of teachers' occupational learning and consequently various pedagogical competencies.

Urban, Reisinger and Samac (2010) found similar results for a sample of $N = 540$ student teachers: the personality traits conscientiousness, neuroticism and extraversion as well as shyness, together with divergent thinking were able to explain 75,5 % of variance of profession-relevant competencies. In contrast, years of teacher experience do not influence the relationship between personality measures and quality of teaching significantly (Emmerich, Rock & Tarpani, 2006). In summary, there are a number of studies which reveal significant but rather small or medium-sized effects between personality scales and (prospective) teachers' success.

There is no consensus yet about the use and measurement of personal prerequisites in the context of university admission. Insufficient predictive power and measurement errors keep practitioners from using personality tests as authoritative admissions criteria. Alternatively, Smith and Pratt (1996) suggest the use of biographical data in admission to teaching. Prior life experiences are considered empirically and conceptually as strong predictors of job performance (Cappelli, 1991). It was already shown that the quantity and quality of student teachers' previous experiences in pedagogical fields interrelate with interests for teacher-specific tasks (Mayr, 1998; Nieskens, 2009). However, in order to use biographical data as admissions criteria, more research is needed (Smith & Pratt, 1996).

After having given evidence for the relevance of cognitive, motivational and personal factors for teachers' academic and occupational success, we describe this study's operationalization of these variables.

3. Methodology

3.1 Sample

Our sample consists of a complete cohort of pre-service teacher candidates ($N = 238$) who applied for the winter term 2011/12 to the TUM School of Education. Each application which was completed within the application deadline (15th July 2011) is considered. $N = 149$ (62.6 %) females and $N = 89$ (37.4 %) males applied for the teacher training programme. The applicants' mean age was $M = 19.55$ ($SD = 2.39$) years. The TUM School of Education's teacher training programme ends with a Bachelor's degree (Bachelor of Education) and educates teachers in the following subject combinations for teaching in grammar school: biology/chemistry (42.4 %), mathematics/physics (23.9 %), mathematics/sports (15.5 %), mathematics/chemistry (13.0 %), mathematics/informatics (5.0 %).

3.2 Operationalization of variables

This study's approach is a systematic analysis of pre-service teacher candidates' application documents. Applying at the TUM School of Education requires the certificate of having passed the Abitur², a letter of motivation (free from requirements concerning format or content) and a curriculum vitae. If existing, applicants can add documents and certificates attesting special commitment at school, internships, engagement in sports clubs or other extracurricular activities. The application documents were used to operationalize the pre-service teachers' cognitive, motivational and personal prerequisites. *Table 1* gives an overview of the obtained variables.

| Dimension | Indicator | Data source |
|--|---|--|
| Cognitive prerequisites | HSGPA | Certificates of having passed the Abitur |
| | Corresponding subject choice in upper school and university | |
| Motivational prerequisites | Intrinsic study motives | Letters of motivation |
| | Social influences Extrinsic study motives | |
| Personal prerequisites (pedagogical experiences) | Private tutoring | Curricula vitae, official documents & certificates |
| | Didactical experiences | |
| | School-related experiences Socio-educational experiences | |

Table 1: Overview of the obtained variables.

Applicants' certificates of having passed the Abitur give information on HSGPAs and courses taken in upper school. We used HSGPs as indicators for the applicants' cognitive ability. Furthermore, we proved if subject choices in upper school correspond to one or both of the chosen teaching subjects. A corresponding subject choice indicates solid previous knowledge.

Although their usage has increased, universities widely vary in their evaluation of letters of motivation (Schmitt et al., 2009). Consequently, we induc-

² German university entrance qualification.

tively developed 18 categories to analyse the pre-service teacher candidates' study and career choice motives. We identified three supergroups: intrinsic study motives (e.g. interest in working with youth and kids, subject-related interest), social influences (e.g. parent is teacher, role model teachers) and extrinsic study motives (e.g. financial reasons, reconciling work and family life). Individual text passages were coded with the help of the software MAXQDA (version 10). 50 % of the letters of motivation were coded by two raters to ensure interrater reliability. As Cohen's Kappa κ cannot be interpreted for variables with unsymmetrical marginal distributions (Wirtz & Caspar, 2002), which applies to all our variables, we used alternative indicators: Percentage agreements were calculated separately for the cases with at least one coding and cases with no coding in the corresponding category. Systematic interrater agreement is given if the percentage agreements differ clearly from the coincidental agreements *and* if Cohen's Kappas κ is revealed as significant (ibid). This is given for all of our variables.

We used biographical data (Smith & Pratt, 1996) gained from curricula vitae as well as from certificates and documents as indicators for the applicants' previous experience in the pedagogical field. We assume that pedagogical experience gives persons the chance to self-check the fit between their personal abilities and specific demands of the working field and thus enable adequate occupational choices. We categorized the biographical data into four different categories to distinguish the type of pedagogical experience: giving private tutoring lessons to other students, didactical experiences in school or tuition institutes, school-related experiences (e.g. special engagement as class representative or internships at school) and social pedagogic experiences (e.g. training children in sports or leading youth groups). Information gained from curricula vitae and certificates were coded into the same categories. As only 28.2 % ($N = 67$) of the pre-service teacher candidates included certificates which (partly) prove their pedagogical experiences, most data were gathered from curricula vitae.

3.3 Statistical methods

We used descriptive statistics and frequency tables to give an overview of the pre-service teacher candidates' prerequisites. Two-step cluster analysis was used to identify generalizing clusters based on selected variables. The aim of cluster analysis is to distinguish a set of objects into several groups by allocating similar objects to the same cluster and allocating considerably differing objects to different clusters (Brosius, 2011). Two-

step clustering allows the inclusion of continuous and categorical variables and automatically determines the optimal number of clusters (Schendera, 2010). Log likelihood was used to measure distances between the cases. Schwarz's Bayesian Criterion (BIC) serves as clustering criterion. All analyses were conducted with the help of the statistical software SPSS (version 20).

4. Results

In this section descriptive statistics are listed for all variables (*sections 4.1 to 4.3*). Some of the obtained variables were used for cluster analysis (*section 4.4*).

4.1 Cognitive prerequisites

The applicants' HSGPAs varied from 1.0 to 3.6, with 1.0 being the best and 4.0 the worst possible average grade. It was $M = 2.11$ ($SD = .55$) in mean. 39.5 % ($N = 94$) of the sample had "very good" (1.0 – 1.9) HSGPAs, 52.5 % ($N = 125$) had "good" (2.0 – 2.9) and 8.0 % ($N = 19$) had "satisfying" (3.0 – 3.9) HSGPAs. In 60.1 % ($N = 143$) of the pre-service teacher candidates at least one of the upper school major subjects corresponds to one of the teaching subjects³.

4.2 Motivational prerequisites

The word count of the letters of motivation was $M = 349$ ($SD = 218.49$) on average and varied greatly ($Min = 43$; $Max = 1584$). One letter of motivation was a blank document and so was excluded from the analyses ($N = 237$). *Figure 1* gives an overview of the most frequently named study motives within the three supergroups intrinsic study motives, social influences and extrinsic study motives. Within the intrinsic study motive, we differentiated between statements about the applicants' interests (e.g. "I am interested in teaching.") and their self-concepts (e.g. "I am good at teaching.") in some variables. Statements about subject-related interests, for example, were reported by 94.1 % of the sample and didactical interests by 75.9 %.

³ This percentage is mainly caused by the subject mathematics, which is a compulsory subject in German schools (whether on basic or advanced level) and belongs to most of the TUM School of Education's subject combinations.

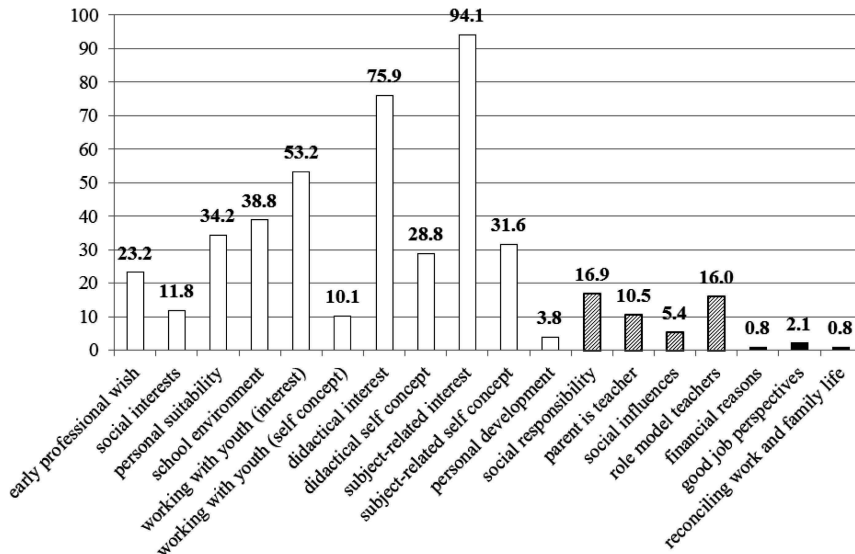


Figure 1: Study motives mentioned in the applicants' letters of motivation.

4.3 Personal prerequisites

Our results show that 41.2 % ($N = 97$) of the pre-service teacher candidates had given private tutoring lessons to other students (cf. figure 2). Furthermore, 28.2 % ($N = 66$) had tutoring and other didactical pre-experiences in school or tuition institutes. Internships and special engagement in schools were reported by 25.6 % ($N = 60$) of our applicants. Socio-educational experiences, mainly training children in sports and youth work, applies to 50.0 % ($N = 118$). In sum, 82.4 % ($N = 196$) of our sample reported having had pedagogical experiences, among these 64.8 % ($N = 127$) females and 35.2 % ($N = 69$) males. Chi-square did not reveal a significant difference between both groups' pedagogical experiences ($\chi^2(1) = 2.23, p > 0.05$). Thus, 17.6 % ($N = 42$) reported not having had any pedagogical experiences yet. Non-pedagogic experiences (e.g. vocational training) were not considered for further analyses.

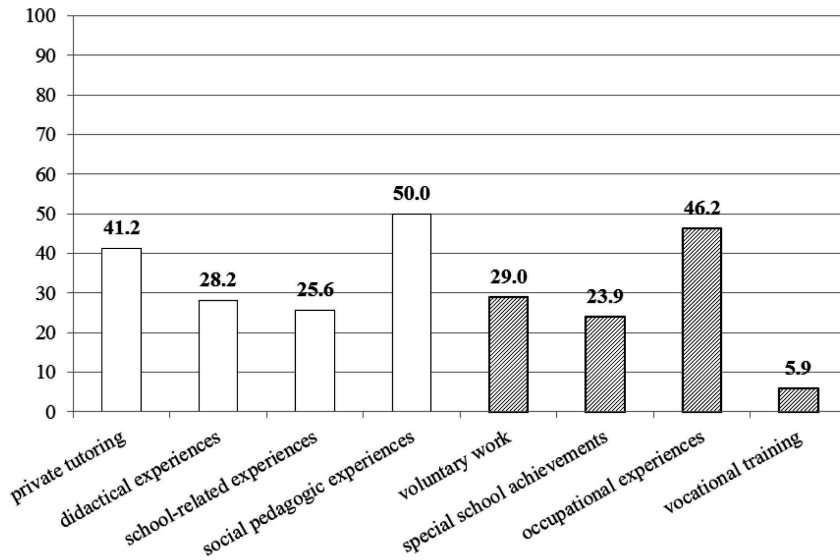


Figure 2: Pedagogical experiences according to the applicants' CVs and certificates.

4.4 Cluster analysis

Two-step cluster analysis was conducted with a reduced selection of variables. In order to further reduce complexity and thus increase the probability for revealing clusters, variables were partly summarized (cf. *table 2*). List-wise case exclusion reduced the sample to $N = 237$ subjects in the cluster analysis. The optimal number of clusters is determined by the lowest BIC value (537.90) and the highest ratio of distance measure (1.77). Five clusters were revealed (cf. *table 3*). Figure 3 gives a graphical overview on the cluster distribution.

| Dimension | Indicator | | Scale level |
|--|---|---|----------------------------|
| Cognitive prerequisites | HSGPA | | Continuous (z-transformed) |
| Motivational prerequisites | Working with youth (interest) | Combined: pedagogical & didactical interest | Binary |
| | Subject-related interest | | Binary |
| Personal prerequisites (pedagogical experiences) | Private tutoring Didactical experiences School-related experiences Socio-educational experiences | Combined: pedagogical experiences | Binary |

Table 2: Overview of the variables used for two-step cluster analysis.

Cluster 1 is the largest group and includes 45.6 % ($N = 108$) of the sample; among these 43.2 % ($N = 64$) females. Subjects of cluster 1 have favourable prerequisites in all dimensions. They have the best HSGPAs in mean ($M = 2.03$, $SD = .56$) and their subjects in upper school and university correspond to each other. Furthermore, all members of cluster 1 show excellent motivational orientations and have experience in pedagogical fields. The variables corresponding to subject choice, pedagogical experiences, pedagogical & didactical interest and subject-related interest are – in descending order – significant in differentiating this cluster from the other clusters.

The smallest cluster with 5.9 % ($N = 14$) of our sample is *cluster 2*. It includes $N = 8$ (57.1 %) females. HSGPAs are $M = 2.16$ ($SD = .46$) in mean and 50.0 % have corresponding subjects. Almost all members of this cluster reported pedagogical or didactical study motives, but nobody reported subject-related interest in the letters of motivation. The majority (78.6 %) had pedagogical experience. Concerning cluster 2, only the variable subject-related interest is significant for group differentiation.

Cluster 3 includes 13.5 % ($N = 32$) of the sample with 62.5 % ($N = 20$) females. HSGPAs are $M = 2.14$ ($SD = .60$) in mean and 40.6 % have corresponding subjects. Nobody reported pedagogical or didactical study motives; but all of them had subject-related interests. $N = 19$ (59.4 %) members of this cluster have experiences in pedagogical fields. Variables which were significant for differentiation are pedagogical & didactical interest and pedagogical experiences.

10.5 % ($N = 25$) were allocated to *cluster 4*; among these 56.0 % females. These cluster members' HSGPAs are $M = 2.18$ ($SD = .53$) in mean and 60.0 % have corresponding subjects. All cluster members reported pedagogical and subject-related interests in their letters of motivation. Nobody had pedagogical experience, which is the only significant variable in differentiating cluster 4.

The *fifth cluster* includes 24.5 % ($N = 58$) of the sample and is strongly dominated by females (72.4 %; $N = 42$). HSGPAs are $M = 2.20$ ($SD = .55$) in mean. Nobody in this cluster has corresponding subjects but all members have pedagogical or didactical study motives, subject-related interests and experiences in pedagogical fields. Differentiating variables are corresponding subjects, pedagogical experiences and pedagogical & didactical interest.

HSGPAs do not significantly contribute to the group differentiations. This is confirmed by analysis of variance (ANOVA), which did not reveal significant differences between the individual clusters' HSGPAs ($F(4) = 1.03$, $p > .05$). Further, the applicants' gender does not differ significantly between the clusters ($\chi^2(4) = 3.54$, $p > .05$).

| | Total | Clusters | | | | |
|---|--|--|--|--|--|--|
| | | 1 | 2 | 3 | 4 | 5 |
| | <i>N</i> = 237 (100%) | <i>N</i> = 108 (45.6 %) | <i>N</i> = 14 (5.9 %) | <i>N</i> = 32 (13.5 %) | <i>N</i> = 25 (10.5 %) | <i>N</i> = 58 (24.5 %) |
| HSGPA | <i>M</i> = 2.11 (<i>SD</i> = .55) | <i>M</i> = 2.03 (<i>SD</i> = .56) | <i>M</i> = 2.16 (<i>SD</i> = .46) | <i>M</i> = 2.14 (<i>SD</i> = .60) | <i>M</i> = 2.18 (<i>SD</i> = .53) | <i>M</i> = 2.20 (<i>SD</i> = .55) |
| Corre- sponding subject choice | <i>N</i> = 143 (60.3 %) | 108 (100 %) | 7 (50.0 %) | 13 (40.6 %) | 15 (60.0 %) | 0 (0.0 %) |
| Pedagogical / didactical interest | <i>N</i> = 204 (86.1 %) | 108 (100 %) | 13 (92.9 %) | 0 (0.0 %) | 25 (100 %) | 58 (100 %) |
| Subject- related interest | <i>N</i> = 223 (94.1 %) | 108 (100 %) | 0 (0.0 %) | 32 (100 %) | 25 (100 %) | 58 (100 %) |
| Pedagogical experiences | <i>N</i> = 196 (82.7 %) | 108 (100 %) | 11 (78.6 %) | 19 (59.4 %) | 0 (0.0 %) | 58 (100 %) |

Table 3: Five cluster solution (method: two-step cluster analysis). N = 1 missing (list-wise). Inaccuracies emerged due to rounding.

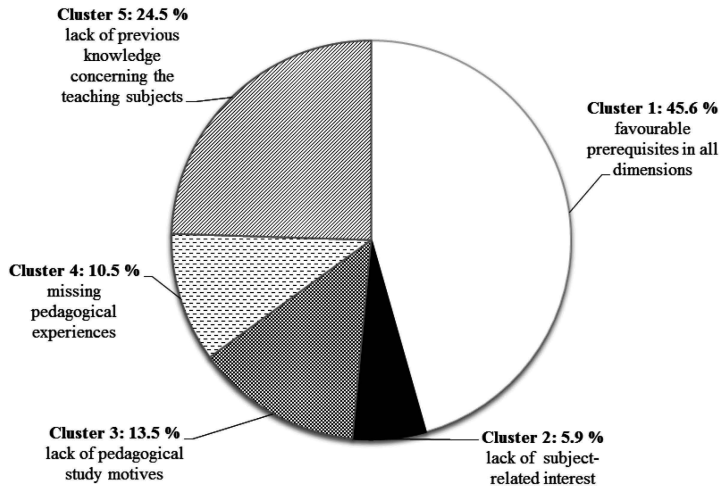


Figure 3: Overview of the cluster distribution with key characteristics.

5. Discussion

In this study, we investigated the cognitive, motivational and personal prerequisites of a complete cohort of pre-service teacher candidates. We analysed certificates of having passed the Abitur, letters of motivation, curricula vitae and certificates to obtain information on our applicants' prerequisites. Our aim was to evaluate the information gained from the application documents and to identify clusters based on the prerequisites of the pre-service teacher candidates.

Descriptive results show that most pre-service teacher candidates of our sample have high cognitive prerequisites which are favourable for academic achievements (cf. Robbins et al., 2004; Trapmann, 2008). Thus, we do not assume a negative selection (Rothland, 2011). Comparative studies revealed good prerequisites for grammar school student teachers, too; often in comparison to students of other types of school or other study subjects (e.g. Giesen & Gold, 1994). More than 60 % of the pre-service teacher candidates chose their teaching subjects already in upper school; therefore we assume a solid subject-related previous knowledge. As mathematics is an obligatory subject in some German states and belongs to most of the subject combinations at the TUM School of Education, we cannot conclude early subject-related interest by implication.

Content analyses of the applicants' letters of motivation revealed that the applicants give a variety of reasons for their study choice. This might be induced by the open format. Our results replicate earlier research which revealed that teacher training aspirants have a mainly intrinsic, pedagogic and subject-oriented study motivation (e.g. Pohlmann & Möller, 2010). These are good preconditions for adequate study durations, low dropout rates, high academic achievements and later job satisfaction (cf. Blömeke, 2009; Credé & Kuncel, 2008). However, we have to assume that the measured study motives are biased due to social desirability.

The pre-service teacher candidates' curricula vitae and certificates provide a wealth of information on the applicants' activities in and outside school. Many applicants showed an impressive engagement in pedagogical fields before study entry, especially in the social educational field and in private tutoring. This shows early interest in pedagogical work, which is typical for teacher aspirants (cf. Nieskens, 2009). However, as only about one third gave evidence of their previous experience, most data is self-reported.

Cluster analyses revealed five distinct groups of pre-service teacher candidates. Almost half of our sample (45.6 %, *cluster 1*) showed excellent prerequisites in all dimensions. A further 24.5 % (*cluster 5*) differ only in marginal worse HSGPAs and non-corresponding subject choices. However, as subject-related study motives were reported, the non-corresponding subject choices do rather reflect a deficit in previous knowledge instead of motivational aspects. In conclusion, 65 % of the candidates show advantageous prerequisites.

In contrast, more than 13 % (*cluster 3*) of our sample did not report didactical or pedagogical study motives in their letters of motivation, which is striking. Surprisingly, almost 60 % of these persons reported having had pedagogical experience. Possibly, members of this group reported their experiences *instead* of their study motives – which would reflect a rather linguistic issue. However, the prerequisites of the remaining 40 % of cluster 3 who had neither pedagogical experience nor showed pedagogical interest, are seen as very unfavourable for the teacher profession. Further investigations are necessary to reveal if this group of persons actually enrolled into the study programme. Although having excellent cognitive and motivational prerequisites, 10.5 % of our applicants (*cluster 4*) did not have any pedagogical experience and so might have unrealistic expectations regarding pedagogical work and their pedagogical skills. Some candidates (8 %, *cluster 2*) did not report interest in the corresponding teaching subjects. Instead, almost all members of this group (92.9 %) showed pedagogical interest. With regard to the demanding study programme at the

TUM and the future task of inspiring children and youth in knowledge content, we consider subject interest as important. Therefore, these persons' prerequisites are seen as rather unfavourable.

In sum, aspirants for the teacher training programme at the TUM School of Education are a very heterogeneous group. It was possible to identify distinct groups on the basis of the gained variables. The cognitive, motivational and personal prerequisites of the majority of candidates were excellent, but there were sub-groups with rather unfavourable subject-related or pedagogical prerequisites. Analysing the application documents of pre-service teacher candidates revealed a promising approach to gathering meaningful information.

Except for HSGPAs, all variables were revealed as significant for group differentiation. This could reflect a methodological issue, as the effects of continuous variables can be underestimated in two-step cluster analyses. Our study results are limited by data losses due to the variables' binary format. Further research is needed to reveal if our sample is representative for other cohorts and teacher training programmes at other universities.

6. Conclusion

As the pre-service teacher candidates' entry requirements revealed very heterogeneous and almost one third of our sample showed unfavourable prerequisites in the motivational or pedagogical area, we consider aptitude testing before study entry as crucial. Letters of motivation and curricula vitae revealed as useful information sources and helpful complements to cognitive criteria. The consideration of information gained from application documents broadens the spectrum of criteria in university admissions procedures which is crucial to teacher education. Assessments of pre-service teachers' cognitive, motivational and personal prerequisites could be used as a basis for conversation in selective interviews, for example, and/or as a starting point of a continuous consulting process aiming at the development of teacher relevant attitudes and competencies.

However, letters of motivation and curricula vitae should be used as supportive information sources rather than single decisive criteria in selective decisions. Further long-term research is needed in order to reveal the predictive validity of the obtained criteria with respect to academic and occupational success. As a final remark, it is important to add that admissions criteria can optimize the input, but the output also depends on many further conditions (Rindermann & Oubaid, 1999).

References

- Albisser, S., Kirchhoff, E., & Albisser, E. (2009). Berufsmotivation und Selbstregulation: Kompetenzentwicklung und Belastungserleben von Studierenden, berufseinsteigenden und erfahrenen Lehrpersonen [Vocational Motivation and Self-Regulation: Competency Development and Strain Experience of Teacher Students, Teachers at Career Entry Phase, and Experienced Teachers]. *Unterrichtswissenschaft*, 37(3), 262-288.
- Amelang, M. & Schmidt-Atzert, L. (Eds.) (2006). *Psychologische Diagnostik und Intervention* [Psychological Diagnostics and Intervention]. Heidelberg: Springer.
- Blömeke, S. (2009). Ausbildungs- und Berufserfolg im Lehramtsstudium im Vergleich zum Diplom-Studium. Zur prognostischen Validität kognitiver und psychomotivationaler Auswahlkriterien [Study and Occupational Success in the Teacher Training Programme Compared to the Diploma Programme – The Prognostic Validity of Cognitive and Psycho-Motivational Admissions Criteria]. *Zeitschrift für Erziehungswissenschaft*, 12(1), 82-110.
- Brosius, F. (Ed.) (2011). *SPSS 19*. Heidelberg: mitp.
- Capelli, P. (Ed.) (1991). *Assessing College Education: What Can be Learned from Practices in Industry?* East Lansing, MI: National Center for Research on Teacher Learning.
- Credé, M. & Kuncel, N. R. (2008). Study Habits, Skills, and Attitudes: The Third Pillar Supporting Collegiate Academic Performance. *Perspectives on Psychological Science*, 3(6), 425-453.
- Emmerich, W., Rock, D. A., & Trapani, C. S. (2006). Personality in Relation to Occupational Outcomes among Established Teachers. *Journal of Research in Personality*, 40(5), 501-528.
- Fellenberg, F. & Hannover, B. (2006). Kaum begonnen, schon zerronnen? Psychologische Ursachenfaktoren für die Neigung von Studienanfängern, das Studium abzubrechen oder das Fach zu wechseln [Easy Come, Easy Go? Psychological Causes of Students Drop Out of University or Changing the Subject at the Beginning of their Study]. *Empirische Pädagogik. Zeitschrift zu Theorie und Praxis erziehungswissenschaftlicher Forschung*, 20(4), 381-399.
- Foerster, F. (2006). Persönlichkeitsmerkmale von Studienanfängerinnen des Lehramts an Grundschulen – Ein Vergleich verschiedener Wege des Studienzugangs [Personality Traits of Study Beginners for Primary School Teaching – A Comparison of Different Study Entrance Procedures]. In J. Seifried & J. Abel (Eds.), *Empirische Lehrerbildungsforschung. Stand und Perspektiven* (pp. 45-61). München: Waxmann.
- Giesen, H. & Gold, A. (1994). Die Wahl von Lehramtsstudiengängen. Analysen zur

- Differenzierung von Studierenden der verschiedenen Lehrämter [The Choice of Teacher Training Programmes. Analyses of Differentiations Between Students of Different Teacher Training Programmes]. In J. Mayr (Ed.), *Lehrer/in werden* (pp. 64-78). Innsbruck: Studien-Verlag.
- Gold, A. & Souvignier, E. (2005). Prognose der Studierfähigkeit. Ergebnisse aus Längsschnittanalysen [Prediction of College Outcomes. Results from Longitudinal Studies]. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, 37(4), 214-222.
- Gottfredson, L. S. (2003). The Challenge and Promise of Cognitive Career Assessment. *Journal of Career Assessment*, 11(2), 115-135.
- Heine, C., Briedis, K., Didi, H.-J., Haase, K., & Trost, G. (Eds.) (2006). *Auswahl- und Eignungsfeststellungsverfahren beim Hochschulzugang in Deutschland und ausgewählten Ländern: Eine Bestandsaufnahme [Admissions and Aptitude Testing Procedures for University Access in Germany and Selected Countries: A Baseline Study]*. HIS Forum Hochschule: Hannover.
- Keller-Schneider, M. (2009). Was beansprucht wen? Entwicklungsaufgaben von Lehrpersonen im Berufseinstieg und deren Zusammenhang mit Persönlichkeitsmerkmalen [Challenges in Teachers' Career Entry Phase and their Relation to Personality Factors]. *Unterrichtswissenschaft*, 37(2), 145-163.
- Kultusministerkonferenz, KMK (2004). *Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland: Standards für die Lehrerbildung: Bildungswissenschaften* [Standing Conference of the Ministers for Education and Cultural Affairs of the Länder of the Federal Republic of Germany: Standards for Teacher Education: Educational Sciences]. Retrieved November 13, 2012, from http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_12_16-Standards-Lehrerbildung.pdf
- Kokkinos, C. M. (2007). Job Stressors, Personality and Burnout in Primary School Teachers. *British Journal of Educational Psychology*, 77(1), 229-243.
- Kunter, M., Baumert, J., Blum, W., Klusmann, U., Krauss, S., & Neubrand, M. (Eds.) (2011). *Professionelle Kompetenz von Lehrkräften: Ergebnisse des Forschungsprogramms COACTIV [Professional Competence of Teachers: Results of the Research Program COACTIV]*. Münster: Waxmann.
- Künsting, J. & Lipowsky, F. (2011). Studienwahlmotivation und Persönlichkeitseigenschaften als Prädiktoren für Zufriedenheit und Strategienutzung im Lehramtsstudium [Study Choice Motivation and Personality Traits as Predictors for Study Success and Use of Strategies in Teacher Education Programmes]. *Zeitschrift für Pädagogische Psychologie*, 25(2), 105-114.
- Linnenbrink, E. A. & Pintrich, P. R. (2002). Motivation as an Enabler for Academic Success. *School Psychology Review*, 31(3), 313-327.
- Lipowsky, F. (Ed.) (2003). *Wege von der Hochschule in den Beruf – Eine empirische*

- Studie zum beruflichen Erfolg von Lehramtsabsolventen in der Berufseinstiegsphase* [Paths from University to Occupation – an Empirical Study on the Occupational Success of Teacher Training Graduates in their Career Entry]. Bad Heilbrunn (Obb.): Klinkhardt.
- Mayr, J. (1998). Die „Lehrer-Interessen-Skalen“ (LIS). Ein Instrument für Forschung und Laufbahnberatung [The Teacher-Interest-Scales. An Instrument for Research and Career Path Counseling]. In J. Abel & Ch. Tarnai (Eds.), *Pädagogisch-psychologische Interessenforschung in Studium und Beruf* (pp. 111-125). Münster: Waxmann.
- Mayr, J. (2007). Wie Lehrer/innen lernen: Befunde zur Beziehung von Lernvoraussetzungen, Lernprozessen und Kompetenz [How Teachers Learn. Findings on the Relation of Learning Prerequisites, Learning Processes and Competence]. In M. Lüders (Ed.), *Forschung zur Lehrerbildung. Kompetenzentwicklung und Programmevaluation* (pp. 151-168). Münster: Waxmann.
- Mayr, J. (2010). Selektieren und/oder qualifizieren? Empirische Befunde zur Frage, wie man gute Lehrpersonen bekommt [Selection and/or Qualification? Empirical Results to the Question of How to Get Good Teachers]. In J. Abel & G. Faust (Eds.), *Wirkt Lehrerbildung?* (pp. 73-89). Münster: Waxmann.
- Mayr, J. (2011). Der Persönlichkeitsansatz in der Lehrerforschung. Konzepte, Befunde und Folgerungen [The Personality Approach in Teacher Research. Concepts, Results and Consequences]. In E. Terhart, H. Bennewitz, & M. Rothland (Eds.), *Handbuch der Forschung zum Lehrerberuf* (pp. 125-148). Münster: Waxmann.
- Mayr, J. & Neuweg, G. H. (2006). Der Persönlichkeitsansatz in der Lehrer/innen /forschung. Grundsätzliche Überlegungen, exemplarische Befunde und Implikationen für die Lehrer/innen/bildung [The Personality Approach in Teacher Research. Fundamental Considerations, Exemplary Results and Implications for Teacher Education]. In M. Heinrich & U. Greiner (Eds.), *Schauen was rauskommt. Kompetenzförderung, Evaluation und Systemsteuerung im Bildungswesen* (pp. 183-206). Wien: Lit.
- McCrae, R. R. & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality across Instruments and Observers. *Journal of Personality and Social Psychology*, 52(1), 81-90.
- Müller-Benedict, V. (2010). Grenzen von leistungsbasierten Auswahlverfahren [Limits of Performance Based Admission Procedures]. *Zeitschrift für Erziehungswissenschaften*, 13(3), 451-472.
- Nieskens, B. (Ed.) (2009). *Wer interessiert sich für den Lehrerberuf – und wer nicht? Berufswahl im Spannungsfeld von subjektiver und objektiver Passung* [Who Is Interested in the Teaching Profession and Who Not? Occupational Choices and the Tension of Subjective and Objective Fit]. Göttingen: Cuvillier Verlag.

- Pohlmann, B. & Möller, J. (2010). Fragebogen zur Erfassung der Motivation für die Wahl des Lehramtsstudiums (FEMOLA) [Motivation for Choosing Teacher Education Questionnaire]. *Zeitschrift für Pädagogische Psychologie*, 24(1), 73-84.
- Retelsdorf, J. & Möller, J. (2012). Grundschule oder Gymnasium? Zur Motivation ein Lehramt zu studieren [Primary or Secondary School? On the Motivation for Choosing Teacher Education]. *Zeitschrift für Pädagogische Psychologie*, 26(1), 5-17.
- Rindermann, H. & Oubaid, V. (1999). Auswahl von Studienanfängern durch Universitäten – Kriterien, Verfahren und Prognostizierbarkeit des Studienerfolgs [Selection of Students by Universities – Criteria, Methods and Predictability of Study Success]. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 20(3), 172-191.
- Roberts, B. W. & DelVecchio, W. F. (2000). The Rank-Order Consistency of Personality Traits from Childhood to Old Age: A quantitative Review of Longitudinal Studies. *Psychological Bulletin*, 126(1), 3-25.
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do Psychological and Study Skill Factors Predict College Outcomes? A Meta-Analysis. *Psychological Bulletin*, 130(2), 261-288.
- Rothland, M. (2011). Wer entscheidet sich für den Lehrerberuf? [Who decides for the teacher profession?]. In E. Terhart, H. Bennewitz & M. Rothland (Eds.), *Handbuch der Forschung zum Lehrerberuf* (pp. 243-267). Münster: Waxmann Verlag.
- Schaarschmidt, U. (2004). Fit für den Lehrerberuf? Psychische Gesundheit von Lehramtsstudierenden und Referendaren [Fit for the Teaching Profession? Mental Health of Teacher Training Students and Pre-Service Teachers]. In U. Beckmann, H. Brandt, & H. Wagner (Eds.), *Ein neues Bild vom Lehrerberuf? Pädagogische Professionalität nach Pisa* (pp. 100-115). Weinheim: Beltz.
- Schaarschmidt, U. (2007). Die Potsdamer Lehrerstudie. Eine vorläufige Bilanz [The Teacher Study of Potsdam. A Provisional Balance. Deutscher Philologenverband. *Profil. Das Magazin für Gymnasium und Gesellschaft*, 3, 4-10.
- Schendera, C. F. G. (Ed.) (2010). *Clusteranalyse mit SPSS: Mit Faktorenanalyse* [Clusteranalysis with SPSS: With Factor analysis]. München: Oldenbourg.
- Schmitt, N. (2012). Development of Rationale and Measures of Noncognitive College Student Potential. *Educational Psychologist*, 47(1), 18-29.
- Schmitt, N., Keeney, J., Oswald, F. L., Pleskac, T. J., Billington, A. Q., Sinha, R., & Zorzie, M. (2009). Prediction of 4-Year College Student Performance Using Cognitive and Noncognitive Predictors and the Impact on Demographic Status of Admitted Students. *Journal of Applied Psychology*, 94(6), 1479-1497.
- Smith, H. A. & Pratt, D. (1996). The Use of Biodata in Admissions to Teacher Education. *Journal of Teacher Education*, 47(1), 43-52.

- Stemler, S. E. (2012). What Should University Admissions Tests Predict? *Educational Psychologist*, 47(1), 5-17.
- Sternberg, R. J. & Grigorenko, E. L. (Eds.) (2002). *The General Factor of Intelligence: How General is it?* London: Lawrence Erlbaum Associates.
- Spiel, C., Litzenberger, M., & Haiden, D. (Eds.) (2006). *Bildungswissenschaftliche und psychologische Aspekte von Auswahlverfahren* [Educational Sciences and Psychological Aspects of Admissions Procedures]. Unpublished PhD thesis, Universität Wien.
- Tarazona, M. (2006). Berechtigte Hoffnung auf bessere Studierende durch hochschuleigene Studierendenauswahl? Eine Analyse der Erfahrungen mit Auswahlverfahren in der Hochschulzulassung [Legitimate Hope for Better Students Through Student Selection by Universities? An Analysis of Experiences with Selection Procedures in the Academic Context]. *IHF Beiträge zur Hochschulforschung*, 28(2), 68-89.
- Trapmann, S. (Ed.) (2008). *Mehrdimensionale Studienerfolgsprognose: Die Bedeutung kognitiver, temperamentsbedingter und motivationaler Prädiktoren für verschiedene Kriterien des Studienerfolgs* [Multidimensional Prognosis of Study Success: The Significance of Personal and Motivational Predictors for Study Success Criteria]. Berlin: Logos.
- Urban, W. (1992). Untersuchungen zur Prognostizierbarkeit der Berufszufriedenheit und der Berufsbelastung bei österreichischen Hauptschullehrern [Research on the Predictability of Job Satisfaction and Occupational Stress of Austrian Teachers]. *Zeitschrift für Empirische Pädagogik*, 6, 131-148.
- Urban, W., Reisinger, C. M., & Samac, K. (2010). Neue Untersuchungen zur heuristischen Kompetenz auf der Basis der Theorie der personalen Ressourcen und des Umgangs mit Komplexität und Unbestimmtheit [New Research on Heuristic Competence Based on the Theory of Personal Resources and Coping of Complexity and Indefiniteness]. In I. Benischek (Ed.), *Empirische Forschung zu schulischen Handlungsfeldern. Ergebnisse der ARGE Bildungsforschung an Pädagogischen Hochschulen in Österreich* (pp. 135-159). Münster: LIT.
- Wirtz, M. & Caspar, F. (Eds.) (2002). Beurteilerübereinstimmung und Beurteilerreliabilität [Interrater agreement and interrater reliability]. Göttingen: Hogrefe.
- Wright, S. P., Horn, S. P., & Sanders, W. L. (1997). Teacher and Classroom Context Effects on Student Achievement: Implications for Teacher Evaluation. *Journal of Personnel Evaluation in Education*, 11(1), 57-67.

This article has been subject to blind review.

Knowledge Creation in Teachers' Professional Development: Tensions between Standardization and Exploration

Kristin Helstad, University of Oslo
Andreas Lund, University of Oslo

This paper examines processes of knowledge creation among an interdisciplinary group of teachers in a Norwegian upper secondary school who collaborated with university experts in order to develop professional knowledge about writing in and across school subjects. The study, which is based on a sociocultural framework with emphasis on mediated, dialogical interaction, explores the processes of knowledge creation that occurred within this learning community over a two-year period. The main data is drawn from audio-recorded meetings, and the analysis traces the interactions between the participants. Special attention is paid to the teachers' use of student texts and resources related to writing to reveal how professional knowledge emerges over time. Findings show that the enduring talk reflects knowledge creation at the juxtaposition of uncertainty, exploration, and the need for standardization. Such knowledge creation emerges as a result of material, social, and conceptual mediation. Hence, the study contributes to an understanding of how teachers' development of new knowledge can be fostered in a school setting through exploratory talk and different forms of mediation. We argue that the study has implications for professional development, teacher education, and workplace learning.

Key words: Teachers' professional development, knowledge creation, mediation

This work is made available under a Creative Commons Attribution 4.0 International (CC BY 4.0) license. The license text is available at <https://creativecommons.org/licenses/by/4.0/>.

Introduction

Teachers' professional development in the knowledge society is closely related to what counts as knowledge in educational settings (Kelly, Luke & Green, 2008). School subjects have traditionally been linked to stable and often standardized knowledge, provided by teachers and made publicly accountable through test systems and exams. However, as Edwards, Gilroy and Hartley (2002) show, traditional school disciplines are being challenged by the increasing turnover rate of knowledge production, and the need for teachers to be socialized into future practices and not just current ones. This requires relational expertise (Edwards, 2005), i.e., the capacity to work across knowledge domains and fields of expertise as a key to revitalizing teacher education and teachers' work. Also, reformers have begun to note that a changed curriculum would not directly lead to changed teaching practices (Coburn & Russell, 2008). New expectations of student performance would entail new ways of teaching, not just ambitious policy documents. Similarly, Hargreaves (2003) shows that existing educational models often prevent innovation and, in fact, make innovative teaching communities deteriorate and give up. His response is cultivating teachers' collaborative and collective expertise by engaging them in action research as true learning communities. Hence, professional development in the form of teachers' learning communities is currently seen as a ticket to change; teachers depend on professional development to cope with their challenges as knowledge workers (Vescio, Ross & Adams, 2008; Little, 2011).

As an increasing amount of research shows, professional learning communities have the capacity to promote and sustain the learning of professionals in the school with the collective purpose of enhancing student learning (Stoll, Bolam, McMahon, Wallace & Thomas, 2006). Key conditions are norms of collaboration, focus on students, access to a wide range of learning resources and mutual accountability for student growth (Lieberman & Pointer Mace, 2009; Vescio et al., 2008). These are conditions that afford and constrain interactions among teachers. However, the research to date has made relatively little headway in examining the nature of such interactions by which a professional community is forged, sustained, and made conducive to learning and improvement (Horn & Little, 2010). Even though it is more common that teachers come together to cooperate and share their experiences, norms of privacy often leave the conversation at the level of the superficial (Little, Gearhart, Curry & Kafka, 2003; Coburn & Russell, 2008). However, as recent studies note, schools with norms that enable teachers to share data about their classroom practice

openly, critique one another, or ask challenging questions are more likely to have conversations that delve more deeply into issues of instruction and student learning (Coburn & Turner, 2011; Horn & Little, 2010; Timperley, 2009). These are concerns addressed in this study.

In addition, few studies have addressed the notion of knowledge creation through analysis of interactions in schools. One example, however, is a study by Lund and Hauge (2010) in which they analyzed how a small group of young learners sought to make sense of a seemingly senseless act of terror. The study showed how the group synthesized diverse and often conflicting information from the Internet, developed a poster and a PowerPoint presentation, and staged a TV debate for the rest of the class to watch and thus developed new insights into a phenomenon that was new and bewildering to them as well as to their teachers and not described in traditional textbooks.¹ The teachers we study are engaged in similar, although less dramatic, work as they seek to develop practices related to student writing and, more specifically, common guidelines for learners' use of sources (in literature as well as on the Internet), and to explore different forms of feedback to student texts in a situation where practices differ across teachers and the school subjects they teach.

The present paper aims to show how a group of experienced teachers in a Norwegian upper secondary school expanded their knowledge base about writing in and across school subjects through an enduring dialogue in a learning community. We do this by examining collaborative processes of knowledge creation (Paavola & Hakkarainen, 2005) as a point of departure. This involves mediated processes that rest on the use of conceptual as well as social and material artifacts (see the section on Theoretical framework for an elaboration). Although we draw on longitudinal data to capture development, the empirical focus in this paper is on five selected episodes from five of a total of 13 team meetings during a period of two years. Against this backdrop, we pursue the following research question:

How does mediated, interdisciplinary talk, supported by university experts, stimulate knowledge creation processes in a team of teachers?

¹ The case referred to is the tragedy at School #1 in Beslan (September 2004) where Chechen rebels took hostages and the Russian troops stormed the school, attacking the rebels. The battle that ensued left 344 dead, among which 188 were children.

In the following we seek to answer this question. First, we present the context of the study before approaching knowledge creation by juxtaposing professional development, mediation, and artifacts within a broader, sociocultural, and activity theoretical perspective. This is followed by a section on our methodological approach and a presentation of the data we analyze. Next, we discuss our findings before concluding with some implications for professional development and education of teachers.

Context of the study

Fagerbakken is a Norwegian upper secondary school with 60 teachers and approximately 600 students. The school enjoys a good reputation, the teachers are highly qualified, and the student results are above national average. Previously, there have been only a few attempts at collaboration across disciplines; generally, teachers have been organized in subject-centered units. However, some of the teachers in this school wanted to learn more about writing in the disciplines, and with support from the principal, they took the initiative to cooperate with two university experts. The experts were invited to engage with and support the team, and to contribute with knowledge whenever requested or they identified a need for it. This resulted in establishing an interdisciplinary writing team consisting of 11 experienced teachers, who all volunteered to the project, and the experts. The writing team met regularly, at least once a month, to discuss students' texts and issues of writing in and across the disciplines. The subject domains of Norwegian as a first language, foreign languages, history, and natural sciences were represented in the teacher team. This local school project, which is both a school development project and a research project, ran for three years (2007–2010) and in close collaboration between the teachers, the experts on writing, and the principal of the school. The purpose of this research project was to identify teachers' emerging knowledge of writing and their discourse strategies when negotiating their perceptions of students' texts, and to explore the ways teachers and experts communicated as they developed their knowledge. According to research on professional learning communities, teachers' learning was assumed, in turn, to increase their repertoire of instructional strategies and to consequently increase student learning (Helstad & Lund, 2012; Vescio et al., 2008).

In the Norwegian Knowledge Promotion Curriculum, K06 (Kunnskapsdepartementet, 2006), writing is defined as one of five basic skills to be

integrated in all disciplines and at all levels.² Hence, this curriculum reflects an international trend where writing is regarded as a strategy for domain-specific learning and communication (Newell, 2006). For learners in upper secondary schools in Norway, critical and accountable use of sources has increasingly emerged as a crucial competence within these basic skills. As the participants in the team concentrated their work on writing of argumentative texts in diverse subjects, the use of sources quickly emerged as a common denominator. The reasons are partly found in the fact that argumentative texts in themselves rest on accountable use of sources, partly in the fact that the K06 curriculum and the trend towards exams opening up for the use of available resources emphasize the importance of correct and productive use of such references. Across subjects, teachers also are encouraged to give students qualified and concrete feedback to texts, including their use of sources, in order to improve students' learning and writing skills. Developing criteria for teachers' response and assessment of students' texts is an important aspect in this work. However, as this is a rather new dimension in several school subjects many teachers feel uncertain about how to integrate it in their practices. In such a situation we see how the teachers we study turn to each other for advice and exchange of ideas and experiences, often mediated by learners' texts, expertise within the group or from the university representative, or concepts from their profession.

Theoretical framework

As indicated in the introduction, teachers of the present and future need to increasingly work with knowledge that is not merely given (such as in textbooks) but with knowledge that is continuously developed and renewed as a result of progress made in diverse scientific domains. This is not to say that teachers are expected to take part in scientific breakthroughs or add historically substantial and original contributions to their fields of expertise. However, their role entails making sense of an ever-expanding volume of information and moving across knowledge domains in order to draw on horizontal expertise and co-configuration of work to adapt to changing needs (Engeström, 2004). It also means working at the edge of one's compe-

² In the Norwegian Curriculum from 2006, literacy in the broadest sense of the word was made a key part, as writing, reading, arithmetic, oral skills and digital skills were to be integrated in all disciplines from 1st through 13th grade. Each teacher is supposed to work with these skills in ways that are relevant in their own discipline (Øgreid & Hertzberg, 2009).

tence; the sheer turnover rate of available information and what counts as current, relevant, and valid knowledge challenges teachers' capacity to keep up with research and not just what the textbooks have to offer.

Today, teachers are not merely expected to be subject-matter experts (in addition to being expert orchestrators of educational activities, social workers, accountable bureaucrats, and dependable and just assessors). In the context of the knowledge and networked society (Castells, 1996), teachers also need to appropriate and even develop new knowledge; increasingly, they have to work at the periphery of their current horizon of professionalism. This calls for a concept of learning and professional development that goes beyond well-established metaphors such as knowledge acquisition and mere participation in communities of practice (Sfard, 1998).

A vital principle in sociocultural theory is mediation; i.e. that our knowledge of the world emerges, is sustained and further developed as we make use of available social, material, and conceptual artifacts. Mediation is a fundamental concept in the Vygotskian legacy (Vygotsky, 1986; Wertsch, 1998). However, when applied to collaborative efforts of creating new knowledge and not just appropriating given knowledge, we need to look for a slightly expanded conceptualization: Vygotsky developed his concept studying how agents acquired given knowledge or approached a problem with an unambiguous solution. In order to expand the conception of mediation to capture processes of developing new and collective knowledge, we turn to Paavola and Hakkarainen's knowledge creating metaphor (Paavola & Hakkarainen, 2005; Hakkarainen, Palonen, Paavola & Lehtinen, 2004) to theorize what teachers are up against.

In a discussion of Annabelle Sfard's (1998) seminal analysis of the acquisition and the participation metaphors, and with special attention to agency, the authors summarized three approaches to learning:

Agency appears to be facilitated through learning processes in which there are aspects of all three metaphors of learning (...); acquisition of existing knowledge ("monological", within mind approach), a variety of ways of participating in cultural practices ("dialogical" approach emphasizing interaction between participants), and joint working for advancing collective knowledge ("trialogical" approach [...]). (Hakkarainen et al., 2004, p. 10)

In the case of "trialogical" knowledge advancement, the authors elaborate what it entails by pointing to a project plan for a mental health facility as an example of a mediating artifact. This makes the knowledge creation metaphor resonate with fundamental principles in activity theory, e.g.

the notion of expansive learning which involves change and transformation (Engeström, Miettinen, & Punamäki, 1999). According to Paavola & Hakkarainen (2005), influential representatives of the knowledge creation metaphor are Engeström's expansive learning theory, Bereiter's knowledge building approach, and Nonaka and Takeuchi's theory of organizational knowledge creation (cf. Engeström & Sannino, 2010). Despite differences between these theories, they have many features in common: (1) pursuit of newness, (2) mediating elements, (3) viewing knowledge creation as a social process, (4) individual subjects in collective knowledge creation, (5) going beyond propositional knowledge, (6) recognizing conceptual artifacts as important, and (7) interaction around and through shared objects. In essence, this approach concentrates on collective and mediated processes involving shared artifacts and objects.

In our analysis of how and what teachers try to make sense of in excerpts from meetings in the writing team we find that the knowledge creation metaphor carries explanatory power when facing the phenomenon we study. With its theoretical foundations in the Vygotskian tradition of language as mediating thinking and activity theory's focus on shared artifacts and objects as vehicles for mental development it functions as an analytical lens when we turn to the empirical material. First, however, we briefly need to present our research design and the methodological approach to knowledge creation.

Research design and methodology

The research design of the present study rests partly on ethnographic fieldwork from 13 meetings of an interdisciplinary team (Silverman, 2006), and partly on interaction analysis (IA) (Jordan & Henderson, 1995) of specific episodes in these meetings. The data corpus, which was conducted from 2007–2009, consists of observations in the form of field notes and audio-recorded data from these meetings, as well as six interviews with participants, logs written by four of the teachers, responses to questionnaires, and document analysis (syllabi and policy documents). The documentation types are mutually constitutive of the object, which is to understand how teachers develop their knowledge in situated activities with shared objects (cf. Paavola & Hakkarainen, 2005).

In order to capture mediated knowledge creation *in situ*, we used interaction analysis as our main methodological approach. In IA, a fundamental assumption is that knowledge emerges in interactions among members of

a particular community, mediated by talk but also mediated by the artifacts they use. IA specifically focuses on how interrelations between talk and the use of artifacts are conducive to professional learning and human development. In this paper, examples of artifacts are the students' written texts (material) and the emerging standards for accountable use of sources (conceptual). Also, IA offers a multi-level approach: how the individual, the social, and the institutional levels aspects of activities converge in such interrelations. Although originally developed with video recordings in mind, we found IA useful for audio-taped recordings as well, since IA allows researchers to capture the complexity and dynamics of interaction.

In order to unpack in some detail what occurred at a specific time, the empirical analysis focuses on the moment-to-moment interaction in five selected episodes from five meetings in the writing team that took place from 2007 to 2009. Thus, while the episodes were selected in order to visualize processes of knowledge creation and to display how these processes stimulate professional development, we also sought to document the possible transformation of teachers' knowledge creation over time. These selections from the data corpus qualify as dialogic episodes understood as a specific type of situated and relational social practice (Helstad & Lund, 2012; Nystrand, 1997). Such episodes constitute the unit of analysis, i.e., the analytic focus that serves to capture seminal moments as well as the temporality of talk.

Furthermore, what delimits the dialogic episodes used in the present study are features that signal emerging knowledge creation through participants' interaction with common objects. Consequently, such episodes are not merely illustrations or examples of a phenomenon, but should be seen as empirical carriers of more general principles. They are not statistically generalizable, but they are arguably analytically generalizable, i.e. in the sense that "the findings from one study can be used as a guide to what might occur in another situation" (Kvale, 1996, p. 233).

Episodes and trajectory

In the episodes that follow, the participants discuss issues related to writing in diverse school subjects. The point of departure for their inquiries is students' texts, which the teachers have brought to the community for discussion. The meetings usually consisted of a discussion of student texts and a session concerning specific issues related to writing competence

where the use of sources emerged as a common problem of inquiry. While teachers of social studies and history have focused on such concerns in their teaching for a while, many of the teachers of other school subjects were quite unfamiliar with these issues. Thus, several teachers expressed uncertainty concerning this matter and the need for common guidelines that would assist them in teaching how to deal with sources. In particular, there was a need to speak unambiguously regarding how to apply in-text references and the literature list following the text. As researchers, we could follow this work over time where drafts of guidelines were negotiated, revised, or rejected before the group settled on a template that could be applied for all subjects at the school.

In episodes 1, 2, 3, and 4, the participants particularly explored if and how developing common standards and guidelines across the subjects is possible, while the last episode (episode 5) shows how the teachers explore new ways of giving feedback to students' texts. In the episodes, we meet 7 of the 11 participating teachers in the writing team and the 2 experts: Frida³, a professor and an acknowledged authority on writing, and Kurt, a teacher of academic writing at the university. Ragnhild is a teacher of natural science; Tora is a teacher of English and the local project coordinator; Ben, Martin and Edith are social science and history teachers; and Kirsten and Liv are teachers of Norwegian as a first language.

Episode 1: Exploring how to approach the use of sources in student texts

In the first episode, December 2007, the question of how to treat sources in student texts emerged. Addressing the goal for their work ("students have to learn to document their sources"), Ben introduces a "simple way" to handle it:

1. Ben (Social science): I intend to make a couple of examples of how students can provide the sources in a simple way. Students have to learn to document their sources, and although this method may not be formally correct, as teachers we need to see that the students have actually read some material that they reproduce in their texts, right?

³ All the names are pseudonyms.

2. Martin (History): It is important that students work with sources all the time. They have to learn more about assessing sources critically and identify their bias and credibility.
3. Kirsten (Norwegian): Is it possible to arrange a workshop on this? I mean the sources on the Internet, for instance, because I have very little experience in these matters. If any of you who have worked with this could teach some of us, I think it could be very interesting.
4. Edith (History): I, too, think that it would be interesting.
5. Tora (English): So you wish for a course in the use of sources and how to assess them critically?
6. Kirsten (Norwegian): Yes, for us and for the other teachers. We're going to propagate this in the subject departments, right? But initially, this is something that we need to explore in our own classrooms, don't you agree?

Providing examples of how the students can manage the use of sources in a simple and not too detailed way, and introducing concepts such as critical assessment, bias, and credibility, Ben and Martin demonstrate specific knowledge as well as experience regarding the use of sources. However, not all teachers are familiar with this, as documented when Kirsten and Edith wonder about the possibility of a workshop in order to increase their own knowledge. The requests from these teachers signal that they are at the periphery of their competence when trying to adapt to changing needs (Engeström, 2004). Also, Kirsten states that before disseminating their new knowledge (potentially acquired in such a workshop) in the subject departments, the teachers need to experience what it entails. As Kirsten puts in a reflection log: "We have to experience the writing strategies ourselves to discover how it works".

This episode shows that the teachers face a dual challenge in their professional development: first, learning what accountable use of sources entails when introducing this into their own practices and second, how such practices can be shared with colleagues. One strategy is for teachers to learn from each other, making scientific knowledge transparent in the community of learners. Social mediation in the form of more knowledgeable peers emerges as crucial at the juxtaposition of exploration and the need for standardized practices. As such, teachers learn to teach the strategies they are developing by figuring out how to teach them to fellow teachers. In the process, they learn to talk about teaching rooted in the context of their own classroom (Lieberman et al., 2009). Hence, collaborative work with sources

as well as common standards might function as drivers for knowledge creation. Such concerns are pursued in Episode 2.

Episode 2: Common guidelines as a dilemma

In a meeting five months later, May 2008, one of the experts, Kurt, introduces a material artifact in the shape of a first draft of a template with common guidelines for how to deal with sources (cf. requests for assistance in Episode 1). The teachers want common standards primarily for them to steer the students towards more accountable use of sources in their written texts. In the following episode, the teachers negotiate these guidelines.

7. Kurt (expert): (*distributing a paper with guidelines*) This is a suggestion; a draft. Next, the school has to decide where to go [with it].
8. Ragnhild (Natural science): Let us present this as an example to our colleagues.
9. Tora (English): Yes, a suggestion. That these are tentative guidelines.
10. Frida (expert): (*addressing Tora, the local project coordinator*) The teachers have to comment on this before deciding anything. I suggest you ask the teachers to help us develop these guidelines. Do not state that, "this is the way you have to do it at this school".
11. Kirsten (Norwegian): (*addressing Kurt*) What kind of template is used?
12. Kurt (expert): The guidelines are taken from a book of references which draws on writing practices in the humanities and social sciences.
13. Tora (English): Okay, but what do we do now? Do we need to respond to what might be misunderstood or what is not covered by the template?
14. Kirsten (Norwegian): Was there anything in the student texts I presented that was in disagreement with these principles?
15. Kurt (Expert): A lot. That's the problem. When we approach this [draft] as a formal standard, it must be fairly consistent.
16. Tora (English): We do not have so much time left. Do we have to decide on this prior to the summer vacation?
17. (*silence*)
18. Ragnhild (Natural Science): And it is because of the students we are doing this, right?
19. (*silence*)

The episode demonstrates the risks of introducing common standards: on the one hand, they function as scaffolding for the teachers in their collective zone of proximal development (Vygotsky, 1986); on the other hand, they risk becoming too rigid as indicated by Frida (10). By suggesting to the local project coordinator that she should ask the teachers to help develop these guidelines, Frida advises the group to be careful, recognizing teachers as autonomous professionals as well as the limitations of a structuring artifact. Further, by opening up for advanced expansion, Frida mediates a possible development into new territory. While validating the draft of guidelines in a book of references (12), Kurt is quite normative referring to “formal standards” and “it must be fairly consistent.” The dilemma is highlighted when the expert (15) acknowledges that the student text presented by Kirsten is not in accordance with the draft of guidelines he had suggested. This dilemma comes across as a discursive manifestation of tensions between standardization and functionality. Together with the time constraints (16), it brings the process to a temporary standstill. The silence in the group (17, 19) suggests that uncertainty on how to proceed as well as relevance for the students dominates at this point. In activity theoretical terms, we could say that the object, which is to improve students’ writing skills, risks slipping away. In episode 3, we see how these problems persist.

Episode 3: Exploring pros and cons of templates and standards

In this meeting, January 2009, the department heads⁴ are gathered to discuss experiences from the writing project and further consequences for professional development in the departments. In this episode, they discuss the common standards for sources that have been introduced and that now have reached a stage where considerable detail has been attained. Frida addresses concerns about this template, expressing her worries about the details to be adhered to by all the teachers. Ben follows up this concern (cf. Episode 1), articulating doubts about the level of detail.

20. Frida (expert): I would have made the template far simpler. I've always been afraid of that list because if that is what our project is to people on the outside, such a recipe has no chance to succeed—it is too detailed—and I cannot imagine that teachers will begin to scrutinize [student texts] and say “you have used periods instead of commas there,” and so on.

⁴ Of the 11 participants in the writing team, 5 are department heads.

21. Ben (social studies): I tell my students that the purpose is not to present the sources formally correct in every detail, but that as a teacher, and as a reader, I find the sources that I know that the students claim they refer to. We have discussed this a lot, it has been a long journey to find something in common with regard to these guidelines. In retrospect, I think that we should have simplified the whole thing.
22. Ragnhild (natural science): Yes, but even for examinations in mathematics, students have to name their sources, and as teachers we actually have the responsibility to teach students how to write more than just content.
23. Frida (expert): Yes, I agree to that.
24. Ragnhild (natural science): But still, the content is the most important thing, I think.
25. Frida (expert): Anyway, the proposed guidelines should be evaluated before the project is complete, or else it could just drift away and result in something that has no impact at all.

This episode shows how the dilemma of standardization and functionality persists. As an expert on writing, Frida intervenes in clear terms (20) and articulates how the conceptual artifact in the form of the guidelines are still tentative and should be made subject to a broader evaluation before being put to use; i.e. she emphasizes the functionality aspect. Hence, Frida shows that the artifact (guidelines) threatens to replace the original object (improving student writing) and thus, threatens the sustainability of their efforts (Engeström, 1990; Lund and Hauge, 2010). Ben (21) corroborates Frida's opinion by drawing on his own practices as a teacher and, as in Episode 1, refers to the purpose of their work. Ragnhild, too (22), articulates their dilemma by bringing in the relation between content and accountable use of sources; "to teach students how to write more than just content." Her utterance suggests that the teachers are in the midst of an expanded notion of what writing in the networked society entails.

So far, the episodes we have examined show how teachers, through articulating their insecurity while at the same time drawing on colleagues' and the expert's insights, are caught in a dilemma; while a rigorous template provides a "safe" prop for an emerging practice, it could also represent a straightjacket counterproductive to reflective use of sources in students' texts. In the following episode, we see how the participants through exploration pursue the problem when material artifacts in the form of various student texts reflecting different school subjects are analyzed.

Episode 4: Exploring ways to follow and expand common standards

In this meeting, March 2009, Liv, a teacher of Norwegian language, brought student texts from her class to discuss issues of sources. After presenting one of the texts from her students, Tora points to the way this student had specified the sources:

26. Tora: (English) I just wonder whether the way this student has presented the references is acceptable. Is this the way our template suggests it should be done?
27. Liv (Norwegian): I told the students about our common standard, which prescribes the way to do it, but if they do it in a way that is almost correct, I think it is okay.
28. (*mumbling*)
29. Kurt (expert): There are different scientific fields that have very different standards. I guess you will come across this issue several times.
30. Frida (expert): I think we have to offer the students a variety of opportunities; do we need to be that strict? Nowadays, it is common to use sources from the Internet, and we need to create templates that are in accordance with this trend. If we only do this in the usual way, I do not know, perhaps we need some new tools here.

This episode shows the difficulties of doing things “the right way” – is there one way or many ways to handle sources in written texts? Tora immediately introduces her uncertainty (26) and looks for support in defining what is “accepted” and “the way” the template is meant to work. When Liv responds, she points to the delicate balance between prescribed standards and pragmatism (27), a concern introduced by Ben in previous episodes. Hence, the teachers ‘see’ two aspects of a phenomenon. This reflects how a professional discipline notices in a particular way and amounts to exercising professional vision, understood as “socially organized ways of seeing and understanding events that are answerable to the distinctive interests of a particular social group” (Goodwin, 1994, p. 606). Kurt develops the point by referring to different standards for diverse scientific domains (29). As Øgreid and Hertzberg (2009) show, different school subjects hold different traditions and standards for writing. At the same time, these are rarely explicitly articulated, resulting in tacit knowledge and vague perceptions of genre differences and conventions.

Further in this episode, Frida expands the topic by referring to the need for “a variety of opportunities” (30) brought about by access to Internet

sources. These require an expanded template artifact that models how such sources can be represented in student texts. The implication is an expansion of the object and a potentially additional element of insecurity.

Episode 4 is an indication that the project team is in the process of collaboratively constructing a more sophisticated and thus uncertain object than when they first set out. Social (experts, colleagues) as well as material (student texts) mediation is at the heart of this process. In the final episode, we see how participants engage in expanding the object by establishing a “research project” while still acknowledging the uncertainty that looms over the project.

Episode 5: Expanding the object: Feedback on student writing

In this meeting, December 2009, Martin elaborates on a “research project,” which he developed together with one of his colleagues and which aimed at examining systematic feedback in digital format to student texts. Such feedback involves the use of criteria and standards discussed in the prior episodes. The previous semester, Frida introduced the community to different forms of feedback, which Martin has picked up. Consequently, an additional perspective on the dilemma is articulated:

31. Martin (social studies): As you know, we got some ideas from Frida about how to respond to student texts. I thought about this a lot during the summer and then Kirsti and I started to provide different forms of electronic feedback. We have a lot of varieties that we're testing out in subjects as social studies, history and Norwegian.
32. Ragnhild (natural science): Do you provide specific tasks to the students?
33. Martin (social studies): We make the assignments, but it is the feedback on the texts we work with, which differs depending on the tasks and the subject. We experiment with different types of responses; we just test it and see what happens, Kirsti has opted for a more detailed version than the one I explore right now. You might call it a sort of experiment, we decided to go for it after Frida's contribution. We are not going to do it regularly – all of this – because it is terribly time-consuming.
34. Researcher: Would you tell us a bit more about this project? What do you actually do?
35. Martin (social studies): We try to figure out whether these lists of criteria and standards in use in almost all schools are of any help at all.

Students are really frustrated about all these lists. They perceive them as meaningless so to speak. We let the students explore different varieties of feedback both with and without criteria, and later, when the students get their texts back with our comments, they reflect on their experiences in written logs. Then they tell us to what extent they used the feedback. It is very exciting when students hand in these logs. But we have to test it further.

This episode shows how at the end of a lengthy project on writing in and across school subjects, experienced teachers explore new practices as they develop material and conceptual artifacts. Their exploratory work is also fuelled by research (introduced by Frida) and experience by engaging in the project. For instance, how the teachers critiqued, negotiated, and developed criteria for the use of sources and how they tested different forms of giving feedback come across as a cyclical encounter with intervention from experts and contributions from peers. This recurring theme reflects the skepticism towards the increasing amount of national and local criteria that may lead to instrumental learning where teachers check off criteria rubrics instead of engaging in true learning processes (Hopfenbeck, Throndsen, Lie & Dale, 2012). On the other hand, many teachers call for criteria because they would then need to spend less time developing tools of feedback and assessment themselves, a concern which is traced in Martins' statement (33): "We are not going to do it regularly – it is terribly time-consuming." Hence, the episode echoes the tensions between standardization and exploration when working with students' writing.

In Episode 5 the (preliminary) result is a practice which is quite bold and potentially innovative, discursively manifested by the many occurrences of terms such as "test," "experiment," and "explore". The exploratory talk, as well as the exploratory work, emerges as a driver for the teachers' professional development. However, the reactions from the students, as articulated by Martin, indicate that teachers and students perceive and make use of concepts and standards quite differently.

Knowledge creation at the juxtaposition of uncertainty, exploration, and the need for standardization

Developing new knowledge about writing across the disciplines is a complex endeavor because it involves teachers traversing the boundaries between the specific school subjects they teach. However, tra-

versing boundaries is necessary in order to expand the educational object and develop relational expertise and common knowledge needed for 21st century education (Edwards, 2005; Edwards, 2012). In the case of the writing project, the episodes reveal how collaborative interactions as well as conceptual and material artifacts mediate such knowledge and expansion.

Collaborative interactions partly materialized in the form of interventions from experts, partly from teachers who were more knowledgeable about the use of sources assisting colleagues who articulated more uncertainty about source use. Thus, we see how social mediation and “going public” with their thoughts in a community of learners were crucial for expanding a multivoiced, collective zone of proximal development for the participants (Daniels, 2001; Lieberman et al., 2009). However, it is also essential to see how such a zone is constituted not just by talk but by the use of artifacts. As our interaction analysis has shown, we encountered both material and conceptual artifacts. The material artifacts primarily involved texts written by students and used by the project participants to exemplify problems and dilemmas of practice regarding how to handle sources and teachers’ feedback to student texts. The evolving template for citing sources is another example. As for conceptual artifacts, we see how guidelines and criteria are at the center of achieving a shared understanding of how different forms of standards balance between the level of detail and pragmatic and more exploratory approaches. This is basically a question of concept validity; the concepts in the shape of criteria to be developed need to match the specific practices that are enacted.

Our analysis of 5 episodes of moment-to-moment interactions from meetings in the writing team shows how teachers slowly move from a situation where the needs for assistance, such as workshops and experts’ contribution, dominate to a situation where they systematically test different ways of giving feedback to students’ texts, referred to as their “research project”. This amounts to a trajectory of knowledge creation in the sense that they pursue and to a certain extent capture and develop their understanding of a phenomenon that is relatively new. This pursuit is driven by tensions between the need for shared standards and flexibility of use and the use of artifacts. It is a joint effort and social process, it definitely goes beyond propositional knowledge (“exploration” is used repeatedly), and it centers on the expansion of a shared object. These are all characteristics of what Paavola and Hakkarainen (2005) identify as knowledge creation.

However, the episodes also show that knowledge creation is a fragile and difficult endeavor. Throughout the episodes, we see how the participants on the one hand move between uncertainty and a realization of the need for

professional development and, on the other hand, express a need to develop templates and standards that can “institutionalize” new practices. The juxtaposition of such diverging aims seems to emerge as a driver of change that goes beyond teachers’ “private practices”. Yet, this may not suffice to establish new insights and professional development and render them sustainable in a larger community such as a school. The teachers seem to be aware of this as they repeatedly addressed how to involve their colleagues (e.g., Kirsten in Episode 1) and their responsibility towards students (e.g., Ragnhild in episode 3). This institutional aspect is also echoed by the expert Frida when she refers to the draft of guidelines, adding that “the school has to decide what to do [with it].” (Episode 2). Thus, the collegial as well as the institutional aspects of knowledge creation point to challenges of making new insights sustainable beyond the participant level.

Conclusion and implications

In our research question, we asked how mediated interdisciplinary talk supported by university experts stimulated knowledge creation processes in a team of teachers. Analysis of the episodes show how such knowledge creation emerges and expands as a result of material, social, and conceptual mediation. This study has demonstrated the way knowledge creation and, in this case, professional development emerges at the juxtaposition of the need for standardization and the exploration of new practices, an endeavor which entails both risks and uncertainty. Also, the study has shown how longitudinal and artifact-mediated collaborative dialogue promotes professional learning and development.

We argue that the findings in the present study have implications for teacher education, professional development, and workplace learning. In the introduction, we referred to research indicating that teachers need to be prepared for emerging and future practices and not just historically institutionalized core practices. However, such future dimensions do not seem to be systematically cultivated in teacher education or in-service training today (Hargreaves, 2003). One reason might be the persistent element of uncertainty that accompanies these dimensions. As shown, uncertainty is very much visible in the episodes we have analyzed, and has also been the subject of research into what constitute contexts for learning and teaching (Edwards et al, 2002; Morgan, Russell & Ryan, 2002). However, this study has shown how such uncertainty might be productive when teachers face the challenge of working at the edge of one’s competence or even going

beyond it. We have seen how uncertainty, in this case, is closely linked to a tension between needs for standardization and further exploration. Such tensions force teachers to use discretion and go beyond groupthink and 'one size fits all' and engage in creative and exploratory activities which, we argue, are conducive to professional development and very much aligned with requirements from the knowledge society.

Regarding professional development and workplace learning, the study has revealed the significance of teachers' collaborative efforts towards increasing their own as well as their students' learning. Cochran-Smith & Lytle (1999) perceived professional learning communities as grounded in knowledge *for* practice, assuming that the knowledge teachers need to teach is generated when teachers treat their own classrooms and schools as sites for investigation; at the same time they treat the knowledge and theory produced by others as material for examination and interpretation. This study has exposed that the recognition of colleagues' and external experts' contributions not only helps teachers become articulate about understanding learning and teaching but it also opens them up to others' ideas, to research and scholarly literature (Lieberman et al., 2009).

In this study, the collaboration in the community of learners has in particular focused on student writing. According to Horn and Little (2010) looking at student data has the potential for bringing students more explicitly into negotiations among teachers, and to expand teachers' opportunity to learn. As work places, schools that support teacher learning and foster a culture of collegiality are better able to support teachers, pursue innovation, respond effectively to external changes and ensure teacher commitment (Little, 2011). Taken together, the writing team in the present study had resources both internally and externally to combine problems of practice with social, conceptual and material tools that supported professional development. However, as Horn and Little (2010) argue, it is the content and the nature of the talk in the community of learners, whether it is superficial or in-depth, that fosters learning and knowledge creation.

As the analysis in the present study has largely built on teachers' talk and their exploratory work with shared objects, we let one of the teachers articulate the essence of the current study. Ragnhild (a science teacher) described it as follows: "There are some tools [referring to mediating concepts and artifacts], and we need to know how to use them (...) The most important part for me has been to learn how to practice writing in a new and expanding manner. Due to the participation in the writing team, I now practice in new ways."

References

- Castells, M. (1996). *The rise of the network society*. Cambridge, Mass.: Blackwell Publishers.
- Coburn, C. E. & Russell, J. L. (2008). District Policy and Teachers' Social Networks. *Educational Evaluation and Policy Analysis*, 30(3), 203-235.
- Coburn, C. E. & Turner, E. O. (2011). Research on Data Use: A Framework and Analysis. *Measurement: Interdisciplinary Research and Perspectives*, 9(4), 173-206.
- Cochran-Smith, M. & Lytle, S. L. (1999). Relationship of knowledge and practice: Teacher learning in communities. In A. Iran-Nejad & C. Pearson (Eds.), *Review of research in education*, 24, 249-306. Washington, DC: American Educational Research Association.
- Daniels, H. (2001). *Vygotsky and Pedagogy*. New York and London: RoutledgeFalmer.
- Edwards, A., Gilroy, P., & Hartley, D. (2002). *Rethinking Teacher Education: Collaborative responses to uncertainty*. London: RoutledgeFalmer.
- Edwards, A. (2012). The role of common knowledge in achieving collaboration across practices. *Learning, Culture and Social Interaction*, 1, 22-32.
- Edwards, A. (2005). Relational agency: Learning to be a resourceful practitioner. *International Journal of Educational Research*, 43, 168-182.
- Engeström, Y. (1990). When is a tool? Multiple meanings of artifacts in human activity. In Y. Engeström (Ed.), *Learning, working and imagining. Twelve studies in activity theory* (pp. 171-195). Helsinki: Orienta-Konsultit Oy.
- Engeström, Y. (2004). New forms of learning in co-configuration work. *Journal of Workplace Learning*, 16, 11-21.
- Engeström, Y., Miettinen, R., & Punamäki, R. (Eds.) (1999). *Perspectives on Activity Theory*. Cambridge: Cambridge University Press.
- Engeström, Y. & Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5, 1-24.
- Goodwin, C. (1994). Professional Vision. *American Anthropologist*, 96, 606-633.
- Hakkarainen, K., Palonen, T., Paavola, S., & Lehtinen, E. (2004). *Communities of Networked Expertise*. Amsterdam: Elsevier/Earli.
- Hargreaves, A. (2003). *Teaching in the Knowledge Society: education in the age of insecurity*. Maidenhead, UK & Philadelphia, PA: Open University Press.
- Helstad, K. & Lund, A. (2012) Teachers' Talk on Students' Writing: Negotiating Students' Texts in Interdisciplinary Teacher Teams. *Teaching and Teacher Education*, 28, 599-608.
- Hopfenbeck, T. N., Throndsen, I., Lie, S., & Dale, E. L. (2012). Assessment with Distinctly Defined Criteria: A research study of a national project. *Policy Futures in Education*, 10(4).

- Horn, I. S. & Little, J. W. (2010). Attending to Problems of Practice: Routines and Resources for Professional Learning in Teachers' Workplace Interactions. *American Educational Research Journal*, 47, 181-217.
- Jordan, B. & Henderson, A. (1995). Interaction analysis: Foundations and practice. *The Journal of the Learning Sciences*, 4, 39-103.
- Kelly, G. J., Luke, A., & Green, J. (2008). What Counts as Knowledge in Educational Settings: Disciplinary Knowledge, Assessment, and Curriculum. *Review of Research in Education*, 32, vii-x.
- Kunnskapsdepartementet (2006). *Læreplanverket for kunnskapsløftet*. [The knowledge promotion curriculum.] Oslo: Kunnskapsdepartementet.
- Kvale, S. (1996). *InterViews*. Thousand Oaks, CA: SAGE.
- Lieberman, A. & Pointer Mace, D. (2009). The role of 'accomplished teachers' in professional learning communities: uncovering practice and enabling leadership. *Teachers and Teaching*, 15, 459-470.
- Little, J. (2011). Professional Community and Professional Development in the Learning-Centered School. In M. Kooy & K. van Veen (Eds.), *Teacher learning that matters: International perspectives*. New York: Routledge.
- Little, J. W., Gearhart, M., Curry, M., & Kafka, J. (2003). "Looking at student work" for teacher learning, teacher community, and school reform. *Phi Delta Kappan*, 83(5), 184-192.
- Lund, A. & Hauge, T. E. (2010). Changing objects in knowledge creation practices. In S. Ludvigsen, A. Lund, I. Rasmussen, & R. Säljö (Eds.), *Learning across sites; new tools, infrastructures and practices* (pp. 206-221). Oxon, UK & New York: Routledge.
- Morgan, W., Russell, A. L., & Ryan, M. (2002). Informed opportunism. Teaching for learning in uncertain contexts of distributed education. In M. R. Lea & K. Nicoll (Eds.), *Distributed Learning. Social and cultural approaches to practice* (pp. 38-55). London: RoutledgeFalmer.
- Newell, G. E. (2006). Writing to learn. How alternative theories of school writing account for student performance. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 235-247). New York, NY: The Guilford Press.
- Nystrand, M. (Ed.) (1997). *Opening dialogue. Understanding the dynamics of language and learning in the English classroom*. New York, NY: Teachers' College Press.
- Paavola, S. & Hakkarainen, K. (2005). The Knowledge Creation Metaphor – An Emergent Epistemological Approach to Learning. *Science & Education*, 14, 535-557.
- Sfard, A. (1998). On Two Metaphors for Learning and the Dangers of Choosing Just One. *Educational Researcher*, 27(2), 4-13.

- Silverman, D. (2006). *Interpreting qualitative data: Methods for analyzing talk, text and interaction*. Los Angeles: Sage.
- Stoll, L. Bolam, R., McMahon, A., Wallace, M. & Thomas, S. (2006). Professional Learning Communities: A review of the Literature. *Journal of Educational Change*, 7, 221-258. Springer.
- Timperley, H. (2009). Evidence-informed conversations making a difference to student achievement. In L. M. Earl & H. Timperley (Eds.), *Professional learning conversations: Challenges in using evidence for improvement* (pp. 69-80). Dordrecht: Springer.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and teacher education*, 24, 80-91.
- Wertsch, J. V. (1998). *Mind As Action*. Oxford: Oxford University Press.
- Vygotsky, L. S. (1986). *Thought and Language* (A. Kozulin, trans.). Cambridge, Ma: MIT Press.
- Øgreid, A. K. & Hertzberg, F. (2009). Argumentation in and across disciplines: Two Norwegian cases. *Argumentation*, 4(23), 451-468

This article has been subject to blind review.

Qualification Frameworks and the Concept of Knowledge

From Aristotle to Bologna, Brussels and Norway

Kristin Barstad, University College of Vestfold, Norway

The purpose of this article is to analyse and discuss the concept of knowledge as it appears in Qualification Frameworks (QF). All Norwegian higher institutions are now working to bring their curricula in accordance with The Norwegian Qualification Framework. This is directly related to the two European processes The Bologna process and the EQF-process and the two European Frameworks linked to them. The problem formulation in this article is: What conceptions of knowledge can be identified in QF? This study draws on the theoretical basis of critical discourse analysis in the form developed by Norman Fairclough and Ruth Wodak. The article discusses how knowledge is conceptualized in the QF and some of the governing documents following them with a special emphasis on the Norwegian Framework. The theoretical understanding underpinning the analysis is built upon the Aristotelian notions of forms of knowledge. The analysis builds on modern scholars' reading of the three Aristotelian concepts of knowledge (episteme, techne and phronesis), and treats these concepts as a key to understanding the building bricks in the framework: knowledge, skills and competences. The purpose and aim for QF is to enhance mobility, transition and communication between the formal educational system, the students and society and future employers. The article questions whether it will be possible to reach the aim because of the lack of a consensus on core concepts.

Key words: Qualification Framework, Higher Education, Aristotelian Concept of Knowledge, Bologna Process, EQF-Process

This work is made available under a Creative Commons Attribution 4.0 International (CC BY 4.0) license. The license text is available at <https://creativecommons.org/licenses/by/4.0/>.

Introduction

The teacher education reform of 2010 added a demanding task for all Norwegian teacher education institutions: to be the first higher educational programme in Norway developing our new curricula in accordance with the new Qualification Framework (NKR)¹. This effort is directly related to the two European processes, the Bologna process and the EQF-process, and the qualification frameworks they contain (FQ-EHEA² and EQF³). The central concept in Qualification frameworks *learning outcome* are acknowledged as one of the basic building blocks of European higher education reform (Adam, 2008)

From a pedagogical point of view the implementation of QF raises several interesting and challenging questions concerning education. The questions regarding implementation and interpretation of QF in teacher education will not be discussed in this article; rather it will focus on the question **“What conceptions of knowledge can be identified in Qualification Frameworks?”**

This article is organised in four sections. An introduction to the topic and the theoretical framework together with a description of how the texts are selected is presented in section one. The three frameworks and some core international documents linked with the frameworks are described in the second section. In the third section concepts of knowledge are presented before a comparison between these concepts and the concepts used in the framework is presented. Concluding reflections and implications are drawn in section four. The three qualification frameworks follow as attachment.

¹ The abbreviation National Qualification Framework (NQR) is used as a common label for the different QF in different countries. The Norwegian NQR is called Nasjonalt Kvalifikasjonsrammeverk (NKR) See appendix for the full text in Norwegian and English (Cycle 1, 2 and 3). (Kunnskapsdepartementet, 2011b)

² “The Bologna Framework”: Framework of Qualifications for the European Higher Education Area (FQ – EHEA) was adopted by the Bologna-Minister meeting in Bergen 2005. See appendix for the full text (Bologna Process, 2005)

³ “EU-Framework”: Established by the recommendation of the European Parliament and The Council of Europe, 23 April 2008: On The Establishment Of The European Qualifications Framework For Lifelong Learning (EQF) See appendix for the full text.

Background: the Bologna process and the Norwegian Quality Reform

The implementation of QF is a central part of reforms in higher education. The Bologna process aimed to establish a European Area for Higher Education (EAHE) (Bergen Communiqué, 2005). One of the reasons for reforms in higher education might be found in the shift from elite university to mass university and the rising number of students attending higher education. University students are no longer necessarily aiming at a future position in academia after graduation; the knowledge-based society demands well-educated and skilful professionals and communicates this expectation to higher education institutions. The Humboldtian ideal, developing and disseminating knowledge for knowledge's own sake might not be regarded by governing bodies as the main purpose of higher education, rather a quest for useful knowledge.

Processes such as internationalisation, the mobility of students and workers and strong emphasis on lifelong learning are part of this picture, as is the emphasis on research and developing empirical knowledge as the basis for educating the new professions (by some called quasi-professions, earlier labelled vocational education and not part of higher education, but now established with education at Master's and PhD-level), and the call for entrepreneurial and innovative skilled candidates. The demand for useful knowledge and the extensive debate regarding theory and practice is linked to these aspects, as is the strong emphasis on competence.

The Norwegian Quality Reform might look like a direct follow-up of the Bologna Declaration of June 1999 (NOU 2000, p. 14; St.meld. nr. 27, 2000-2001). But the assessment of the Norwegian higher education system started earlier with the appointment of a National Commission in April 1998 (Nyborg, 2001). This culminated in the implementation of the reform in 2003, which changed the entire system of higher education in Norway. The Quality Reform was characterized by a strong international focus, but it was also a national reform of our system of higher education, which meant that it was inwards-directed, and had the national arena of higher education both as primary frame of reference and object of reform (Tjomsland, 2004).

To follow up the Bologna Process there were regular stocktaking reports that answered to the ten indicators within three areas connected to the process: *Degree system*: 1) Stage of implementation of the first and second cycle; 2) Access to the next cycle; 3) Implementation of national qualifications framework. *National implementation of Standards and Guidelines for Quality Assurance in the EHEA*: 4) Stage of development of external quality

assurance system; 5) Level of student participation in quality assurance; 6) Level of international participation in quality assurance. *Recognition*: 7) Stage of implementation of Diploma Supplement; 8) National implementation of the principles of the Lisbon Recognition Convention; 9) Stage of implementation of ECTS; 10) Recognition of prior learning.

European policy makers are concerned with the implementation processes in the countries that have adopted the framework, and monitor them closely (Bologna Process Stocktaking London, 2007; Bologna Process Stocktaking Benelux, 2009). For different national politicians it has been important to report “mission completed” to the European bodies.

Critical discourse analysis

The concept *discourse* have many meanings that often seem to be contradictory or mutually exclusive, but the definition from Van Dijk (1977) sees discourse quite generally as *text in context* and as evidence to be described empirically. The critical discourse analysis model offered by Fairclough (1989) puts the text in context and provides tools to analyse texts from different angles.

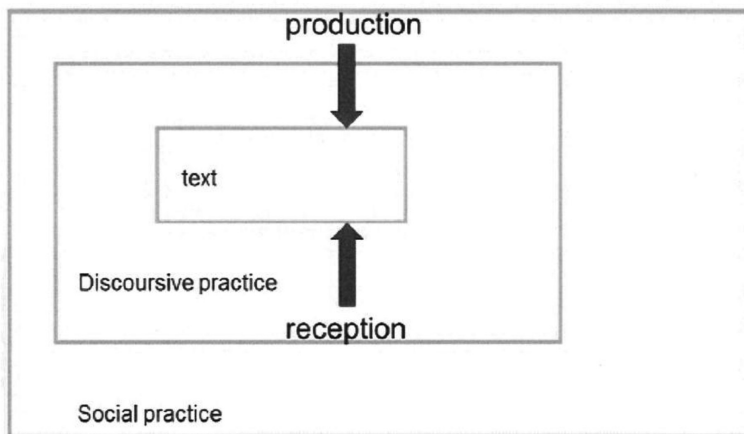


Fig 1. Fairclough's critical discourse analysis model (Fairclough, 1989, p. 25).

Critical discourse analysis theory and method builds on: “[...] the complex model of communication that is interactive and dialogical in character, rather from the sender-hearer form of type of model used in traditional

communication theory” (Wodak & al, 2000, p. 24). Also the *intertextuality* that is related to this type of communication and the assumptions that every text is embedded in a context and is synchronically and diachronically related to many other texts is central in this theory.

This analysis builds on this definition:

Critical Discourse Analysis sees discourse – language in use in speech and writing – as a form of ‘social practice. Describing discourse as a social practice implies a dialectical relationship between a particular discursive event and situation(s), institution(s) and social structure(s) which frame it: the discursive event is shaped by them, but it also shapes them. That is, discourse is socially constituted, as well as socially conditioned – it constitutes situations, object of knowledge, and the social identities of and relationships between people and groups of people. It is constitutive both in the sense that it helps sustain and reproduce the social status quo, and in the sense that it contributes to transforming it. (Wodak, 1996, p.15)

This emphasizes the idea of discourse as constitutive of reality and raises questions of power and ideology.

A decisive aspect is that discourse should be understood as *action* and an act of communication. Because of intertextuality, there can in principle be no objective beginning and no clear end, since every discourse is bound up with many others and can only be understood on the basis of others (Wodak & al, 2000, p. 26). Interesting questions are: How may one decide how much contextual knowledge is necessary? Where does a context begin and end? Do we have to describe ‘everything’ about a context?

The study objects in this article are pedagogical-political texts (the three QF mentioned above), which are intended to lead to action in different higher institutions throughout Europe, and it is most interesting to see which paradigms and traditions they are part of. The intertextuality of the documents is striking. Knowing the meaning, background and rationality of the frameworks are important to later understand their implications for teacher education.

Selection of texts

The three frameworks, EQF, FQ-EHEA and NKR are closely interlinked and built on some shared policy documents (Kunnskapsdepartementet, 2011a). The Tuning project⁴, funded by the EU, but initiated by the Bologna-process, has provided several of the base documents for developing the Bologna Framework. Also the documents connected to EQF especially refer to the work of the Joint Quality Initiative (Bologna process-network), and use the FQ-EHEA descriptors as a reference in their information about EQF. Finally, the Council of Europe also emphasizes the close linkage of the two European processes and the documents they contain:

In the area of qualifications frameworks, the Council of Europe has been an important actor since the concept was first brought into the European policy debate in 2003 and since 2007 the Council of Europe has taken the lead in “supporting the sharing of experience in the elaboration of national qualifications frameworks” (Communiqué of the Ministerial Conference of the Bologna Process held in London in 2007). As such, the Council of Europe chairs the Bologna working group on qualifications frameworks and it has developed close co-operation with the European Commission (paragraph 9) which oversees the European Qualifications Framework for lifelong learning adopted in 2008. (Council of Europe, 2010, p. 3)

European and national frameworks (EQF, FQ-EHEA, NKR)

Qualification Frameworks were first mentioned in the Bologna Conference in Copenhagen in 2003 and in the Berlin communiqué in 2003 (Bergan, 2010). The frameworks have been identified as a key tool for the realisation of the EHEA and are supposed to function as tools both for students, curriculum development and national bodies responsible. It is said that QF are not intended to be administrative straightjackets or to make all national education systems identical, but rather an instrument to help European higher education strike a balance between what we have in common and what is particular to each system. The FQ-EHEA is supposed to be an

⁴ TUNING Educational Structures in Europe started in 2000 as a project to link the political objectives of the Bologna Process and at a later stage the Lisbon Strategy to the higher educational sector. Outcome of the project are presented in a range of publications.

instrument that promotes transparency by providing a common framework for the diversity that is one of the strengths of European higher education, and hence a framework to help understand diversity (Bologna Process homepage), and also enhance communication between the formal educational system, students and society and future employers.

The utility aspect is most emphasized: “An NQF means an instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society” (Cedefop, 2009, p. 1).

None of the two European Qualification Frameworks adopted the proposal from the Tuning project without major changes. EQF and FQ-EHEA define ‘learning outcome’ in the same way, but have different descriptors. The Bologna Framework does not use the concept ‘competence’ as a descriptor. The EU-framework does, but in a different way to that proposed by the Tuning Project.

| A learning outcome is a statement of what a learner knows, understands and is able to do on the basis of a given qualification | |
|---|---|
| EQF (EU) | FQ- EHEA (Bologna) |
| <ul style="list-style-type: none"> • Knowledge: In the context of EQF Knowledge is described as theoretical and/or factual. • Skills: In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments) • Competence: In the context of EQF competence is described in terms of responsibility and autonomy | Dublin descriptors (generic) <ul style="list-style-type: none"> • Knowledge and understanding • Applying knowledge and understanding • Making judgements • Communication skills • Learning skills Not subject specific |

Fig 2. Definition of learning outcome in EQF and in FQ- EHEA.

The implementation process demands some questions and considerations regarding aspects relating to the nature of knowledge and core elements related to the body, borders and levels of knowledge, the teaching-learning processes linked to the tradition, and finally what the education qualifies students for.

QF is supposed to promote a better relationship between level, learning outcomes, assessment criteria and teaching methodologies. This is connected with important pedagogical questions regarding which definitions of knowledge and learning are chosen: what is important knowledge; which knowl-

edge must be generic across study programmes; how do we provide learning environments for the knowledge; which learning strategies will be fruitful; and finally, how do we assess? All are didactical questions that are at the core of pedagogical theory and teacher education:

The development of qualifications frameworks on a European as well as on a national level deals with issues that represent the *heartland* of curriculum policy and curriculum practice. Consequently, I find curriculum theory a fruitful analytical point of departure given that qualifications take account of the prescribed learning objectives and learning outcomes of higher education. With the introduction of qualifications frameworks, curriculum issues that used to be dealt with on an institutional level have become political issues on a national and even supranational level. Implicitly and explicitly a framework indicates what ought to be the purpose, content, sequence and evaluation of a programme, which all represent central elements of the definition of curriculum. (Karseth, 2008, p. 3)

From the EU it is noted that: “There is broad agreement that NQF supports the introduction of explicit, learning outcomes based qualifications levels. Without these, the process of linking national qualifications levels becomes complicated. Some countries originally sceptical of the value of NQFs, for example Finland and Norway, have embraced the concept and are now actively involved in their development and implementation” (Cedefop, 2011, p. 10).

The Norwegian Qualification Framework

The two European frameworks introduce familiar concepts, but in a new wrapping. Of the two alternatives for describing learning outcomes, the Norwegian working group (appointed by the Norwegian Ministry of Education and Research) emphasized in their report that the descriptors had to be simple and understandable for everybody, and they proposed that the Ministry should establish NKR based on EQF rather than the Bologna framework (Kunnskapsdepartementet, 2007). The Ministry established the Norwegian Qualification framework for Higher Education early in 2009, followed by a three page letter referencing the proposal of the national framework the working group submitted in 2007 and the institutional responses to it. The notions were *Læringsutbytte* (*Learning Outcome*) using the EQF-descriptors *Kunnskap* (*Knowledge*), *Ferdigheter* (*Skills*) and

Generell kompetanse (Generic Competence). Norway does not operate with “intended learning outcome” and “achieved learning outcome” as, for instance, Sweden does⁵. Further deployment or discussion of some of the significant issues that were raised in a number of consultation replies from the institutions was lacking (Karseth, 2008).

Attention regarding the introduction of QF has been low among professionals in Norwegian higher education. Several stakeholders find this puzzling and one can speculate about whether this is due to the traditional view that curricula and syllabuses are technical and administrative (and perhaps boring?) issues, caused by the view that QF constitutes administrative requirements of a more technical nature, where a relatively mechanical transfer from current syllabuses into a new template would be possible without major difficulties. Implementing QF might also be regarded as a bureaucratic matter, not as a profoundly scientific, pedagogical and educational task. Also from the EU it is noted that:

While most stakeholders agree on this general objective, experiences so far show that NQF developments are indeed political processes which in some cases trigger conflicting points of view. Frameworks provide a new platform for dialogue – across traditional borderlines of subsystems, sectors and institutions – facilitating discussion on how to improve current practices and how to remove barriers to education, training and learning. It is important to keep in mind this political character of the new national frameworks; to understand them as neutral, technical instruments, seems inappropriate. (Cedefop, 2009, p. 2)

Ewell notes as drawbacks linked to implementing learning outcome:

(...) the terms and concepts underlying outcomes based approaches are fundamentally rooted in the contexts of business, education, and the social sciences. Business concepts (like those associated with Total Quality Management) provoke natural suspicion in much of the academy because they are associated with what many see as growing commercialization or “managerialism” in higher education. At the same time, education and the social sciences are not generally at the top of the disciplinary “pecking order” at most universities. Together, these perceptions mean that the

⁵ Sweden use “lärandemål” [learning goal] and läranderesultat” [learning achieved]. See also the article by Vidar Gynild (2011) for an interesting discussion on this topic.

initial legitimacy that any outcomes based approach will command will vary significantly and predictably by disciplines. For the professions, accustomed to external standards and frequently subject to licensing examinations governing entry, the approach will be largely familiar and should encounter little resistance. For other disciplines, care and time must be taken to allow the underlying concepts to be translated and internalized. (Ewell, 2001, p. 9)

In Norway it has been emphasised that “[...] neither the technical review, nor the referencing process as a whole is intended to change the Norwegian education system. The NKR has to fit the Norwegian context and has to be rooted in the existing Norwegian education, practices and structures” (The Norwegian referencing group, 2011, p. 2).

Writing complete new curricula based on learning outcomes is a comprehensive, complex and interesting epistemological process. Curricula are traditionally ‘input-focused’; the descriptions are usually in terms of what the study will cover, the content is listed and the main theories, events, processes and relationships are mapped-out. Adam states that:

In terms of curriculum design and development, learning outcomes are at the forefront of educational change. They represent an adjustment in emphasis from ‘teaching’ to ‘learning’ typified by what is known as the adoption of a student-centred approach in contrast to the traditional teacher-centred viewpoint. Student-centred learning produces a focus on the teaching – learning – assessment relationship and the fundamental links between the design, delivery and measurement of learning. (Adam, 2006, p. 3)

Different disciplinary fields use different languages and map their content differentially. Belcher’s striking concept of Academic Tribes and Territories offers a fruitful metaphor for academic activity, traditions and culture in Higher Education institutions (Becher & Trowler, 2001). In Norway – different from Anglo-Saxon countries – there has been no tradition of using the qualification framework. The short professional education mainly offered by university colleges has had the tradition of national curricula given by the government.

Central concepts in qualification frameworks

Competence

The concept *competence* is frequently used in educational contexts. The Tuning project links the concept to learning outcomes:

According to Tuning, learning outcomes are expressed in terms of the *level of competence* to be obtained by the learner. Competences represent a dynamic combination of cognitive and meta-cognitive skills, and ethical values. Fostering these competences is the object of all educational programmes, which build on the patrimony of knowledge and understanding developed over a period of many centuries. Competences are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), others are generic (common to any degree course). (González & Waagenaar, 2008, p. 9)

This definition and framing for QF seems very familiar to the Norwegian educational tradition. The Tuning project proposes competences as the main target to be implemented, followed by statements about which learning outcomes, educational activities and workload are contained in the module:

Programme of Studies:

Name of the module / course unit:

Type of course (e.g. major, minor, elective):

Level of the module / course unit (e.g. BA, MA, PhD):

Prerequisites:

Number of ECTS credits:

Competences to be developed:

1.
2.
3.
4.
5.
6.

| Learning outcomes | Educational activities | Estimated student work time in hours | Assessment |
|-------------------|------------------------|--------------------------------------|------------|
| | | | |
| | | | |
| | | | |

Fig 3. Planning form for an educational module. (Gonzales and Waagenaar, 2008, p. 88).

The concept of competence⁶ is and has been crucial in Norwegian education. A common-sense definition many have been leaning on is “Competence is the combination of knowledge, skills and attitude”. Our teacher education has had a tradition of more than 10 years of writing curricula in a competence-based framework. But it is also interesting to note that in the translated version of the curricula determined by the Ministry in 1999, the concept “competence” was translated to “skills”: *Specialist subject skills* (Fagleg kompetanse), *Teaching skills* (Didaktisk kompetanse), *Social skills* (Sosial kompetanse), *Professional ethics skills* (Yrkesetisk kompetanse) and *Development skills and the ability to change* (Endrings- og utviklingskompetanse). As NKR was implemented in Norway, familiar concepts were given a complete new framing and partly new content.

The concept of knowledge

The “new” Aristotelian tradition of knowledge as outlined by Gustavsson (2000), Saugstad (2005) and Grimen (2008) seems to have grown from the new interest and development of practical and professional knowledge in Higher education and research. In Norway this debate is especially important as an increasing number of university colleges emphasize professional and vocational knowledge, develop more research based education and aim at establishing professional Master- and PhD-programmes. These processes emphasize the importance of developing a scientific *and* practical knowledge base for education programmes which do not primarily aim at educating future university scholars but a skilled working-force in modern society.

The important question ‘What is knowledge’, is complicated, comprehensive and challenging to get to grips with. The concept of knowledge is part of common-sense and our daily life. In the 1980s a new awareness of practice arose which had its roots in a ‘pragmatic turn’, and a focus on the utility use of knowledge and on the development of competences as an alternative to traditional and theoretical-scientific academic knowledge.

⁶ A brief search of documents from the Norwegian Ministry’s web (April 12) provides 1140 hits on the term/concept. One definition one may find is this: Competence is the knowledge and skills used to solve problems and meet challenges (My translation) http://www.regjeringen.no/nb/dep/kd/tema/utdanning_og_kompetanse.html?id=1407). The concepts *formal competence* and *real competence* are also often used to signify the difference between a formal qualification and the qualifications awarded through working-experience, and are established as core concepts in Norwegian recognition-procedures of lifelong learning.

Discussions connected to practical knowledge gained influence in the development of the “knowledge society”. With the starting point in the writings of the philosophers Wittgenstein, Ryle and Polanyi, questions regarding practical knowledge including the concepts of bodily and tacit knowledge were discussed, and also the relationship between practical and theoretical knowledge. Grimen argues the case for using a comprehensive concept of knowledge where practical knowledge is a natural part:

The term ‘knowledge’, might signify a family of phenomena. There is a reason to argue that practical knowledge is knowledge; it might be articulated, it might be learned and be criticised, it is transferable and might be articulated through action. (Grimen, 2008, p. 84. My translation)

Tacit knowledge. “We can know more than we can tell”

In vocational and professional knowledge the concept of bodily and tacit knowledge is central. Polanyi introduced the concept and emphasized the tacit aspect in all knowledge, and conversely, that no knowledge is completely tacit (Polanyi, 1983; Grimen, 2008). Polanyi opposed the materialistic vision of the world and the view that all knowledge has to be explicitly verifiable. He traced positivism to the rejection of Aristotelian and religious traditions, which were seen as oppressive and hindrances to the pursuit of truth (Mitchell, 2006). He also emphasizes the personal dimension of knowledge and that knowledge is an activity, and proposes the concept of “knowing” as different from “knowledge”.

There might be several possible causes why knowledge is tacit. Formal and informal norms and rules (as legal law or etiquette) might be one, which is regarded as common sense, unproblematic or self-evident another, and not comprehending one’s own knowledge is a third. Articulating tacit knowledge has been central in developing professional education and research. In several vocational or professional contexts bodily perceptions and knowledge are central and critical for dealing with the situation.

“Whereof one cannot speak, thereof one must be silent”

The early Wittgenstein’s concept of “tacit knowledge” stems from his first theory of language, where he addressed the limits of language and what there is beyond language. He made a distinction between *saying* and

showing, arguing that there are, beyond the senses, things that can be formulated in sayable (sensical) propositions, things that can only be shown (Stanford Encyclopedia of Philosophy). His ideal was a direct correspondence between language and the object it depicts; concepts had to have a reference to objects in the world to represent the truth. And by this there would be an existence of that which is unsayable.

The famous concepts “knowing that” and “knowing how” introduced by Ryle are one of the foundations of professional theory: “(...) knowing that something is the case and knowing how to do things” (Ryle, 1945, p. 4), Ryle construed and asserted that the workings of the mind are not distinct from the actions of the body, “Intelligently to do something (whether internally or externally) is not to do two things, one “in our heads” and the other perhaps in the outside world; it is to do one thing in a certain manner” (Ryle, 1945, p. 3). He also stated that knowing how to perform an act skillfully may not be only a matter of being able to reason practically, but also a matter of being able to put practical reasoning into action.

The Aristotelian concept of knowledge

In developing professional and practical education, Saugstad (2005) proposes Aristotle’s broad conception of knowledge (Aristotle Book VI, p. 112⁷) as a key to understanding practical knowledge and suggests that three of his his main categories of knowledge: *episteme* – the theoretical, *techne* – the productive, and *phronesis* – the social-ethical, can serve to differentiate and expand modern comprehensions of knowledge, learning and practice. Epistemological history shows that changing hierarchy and representatives of the dominant science view themselves as the bearer of “true knowledge”. Aristotle himself regarded *episteme* as the most advanced and valuable (Aristotle Book VI, p. 117).

Also the Swedish philosopher Bernt Gustavsson notes that knowledge, as depicted in the media and in political discourse, appears as if it were completely clear what we mean when talking about knowledge (Gustavsson, 2000). He also proposes using the Aristotelian division of knowledge to grasp the multifaceted and complex picture of knowledge today when he

⁷ All references to Aristotle’s *Nicomachean Ethics* are taken from the Bokklubben Nye Bøker edition (1999), and includes the page numbers in that edition.

outlines the relationship between profession and knowledge. He emphasises that *episteme* and *techne* is part of the Greek tradition, while *phronesis* – in his view the most interesting concept of the three – is a specific Aristotelian one. *Techne* and *phronesis* are practical knowledge and hence of the body. You might demonstrate bodily knowledge without speaking, but not without the body acting.

The Danish educational philosopher Tone Saugstad uses Aristotle's conception of knowledge as a key to understanding practical knowledge, and the differences between learning in practice and learning in schools, and also the paradigmatic differences between these ways of learning. She divides knowledge into theoretical and practical knowledge forms, and then describes the characteristics of each according to four principles:

- Correspondence between knowledge form and area of life;
 - The function or purpose of knowledge;
 - The activity form, or how knowledge is unfolded;
 - How knowledge is learned;
- (Saugstad, 2005, p. 353)

In schools and the educational sector, the social constructionist tradition, with emphasis on situated learning, has had a significant impact. According to this paradigm all learning is related to activity and social practice. Interest is thus not aimed at de-situated knowledge that is abstract and independent of context. The demand for useful or usable knowledge has had among both students and in educational policy contexts significant impact; theory must be relevant to practice, and what you learn must be directly useful for later professional work. Saugstad questions the coupling of theory and practice:

The Aristotelian differentiation between theoretical and practical knowledge raises questions about the dogma that educational theory and practise are, or should automatically be, connected. This, in turn, opens up a discussion about what should be learned in schools and what should be learned in practical life. (Saugstad, 2005, p. 348)

Saugstad extracts two strategic directions in the current education policy landscape: revitalization of the apprenticeship model and the use of various management theories, combined with the ideas of progressive education as examples of strategies that are adopted to reduce the gap between theory

and practice. These strategies ignore in her opinion that the different forms of knowledge, *episteme*, *techne* and *phronesis*, are differentiated and related to various areas of life: function and purpose, activity, shape and form of learning. Because all practical knowledge appears in the form of personal proficiency or expertise, and is based on life experience and rehearsal, it has to be learned by doing what one has to learn in the situation where what is learned is to be applied. Therefore, learning in practice is qualitatively different from the scholastic form of learning.

Aristotelian concept of knowledge applied to NKR

Modern scholars offer, with reference to Aristotle, a better understanding of the concept of knowledge, aspects of teaching and learning and the relationship of theory and practice. It can also contribute to the problem related to the implementation of the NKR, how to prevent this process from being only a technical exercise. Teacher education has to build on a broad concept of knowledge since a teacher needs subject knowledge, must know how to manage challenges and tasks, and of course also be able to act ethically as wise mentors for students. Today, this is a requirement for all professional education programmes; to be able to participate in society as active citizens there is a demand to act wisely in a given situation, often without time for deep analysis and contemplation.

The table below tries to show the possible connections between today's knowledge discussions and the ancient forms of knowledge. It is based on my reading of Aristotle and different modern scholars (Grimen, 2008; Gustavsson, 2000; Saugstad, 2005) interpretations and presentation of Aristotelian thoughts. The table draw on the tradition of discourse analysis as these texts are embedded in a historic context and hence related to many other concepts. The lack of an objective beginning and a clear end is also striking, and shows how this discourse is bound up with many others and can only be understood on the basis of others.

The three Aristotelian concepts of knowledge are interlinked and may, of course, not be transformed directly into today's educational life, rather be used as a key to come to a closer understanding of the building bricks in the frameworks. Our tradition of knowledge has its roots back to ancient Greece, hence might modern interpretations and discussions of Aristotle and some overall epistemological concepts be framed in this simplified schema:

| Aristotelian forms of knowledge | | |
|--|---|---|
| Theoretical-scientific knowledge: EPISTEME <ul style="list-style-type: none"> To know/knowledge Justified true belief (definition from Plato) Understand how the world is structured Tested and falsified knowledge, universally, abstract, generic | Practical-productive knowledge: TECHNE <ul style="list-style-type: none"> To know how to do/proficiency Knowledge in action (poesis) To create and produce Instrumental, situated knowledge | Political- ethical knowledge PHRONESIS <ul style="list-style-type: none"> To act wise/prudence Meaningful and value-based actions of an ethical-social character (praxis) Practical wisdom, sound judgement, ethical human beings, the normative intertwined in the knowledge |
| Related to enlightenment, positivism, empiricism, phenomenology | Pragmatic tradition Reflection <i>on</i> practice in practice | Hermeneutics |
| Objective knowledge Mathematics, natural sciences | Tacit knowledge Bodily knowledge | Social and ethical knowledge, reflections: what the good consists of |
| Knowledge that inhibit its own goal | Knowledge as an instrument/means to reach a goal outside the activity | The goal is part of the action |
| “Knowing that” | “Knowing how” | “Knowing when” |
| Correspondence between knowledge form and area of life | | |
| Theoretical Scholastic paradigm | Practical Non-Scholastic paradigm | Practical Non-Scholastic paradigm |
| Primarily used in science and scientific theory. Exist out of necessity, might not be different, humans cannot change the theoretical knowledge. Universal, certain, eternal, general, abstract True and secure knowledge | The utility and useful aspect of knowledge is central. Focused on possibilities/what might happen. Situated knowledge, based on experience and context. Productive, practical, pragmatic, negotiable. Humans might influence on this knowledge | Concerning thinking and reasoning, how we think about what could be different Ethical attitude (hexis) Tradition, ethics related to actual knowledge, not strictly distinguishing between fact and value. Used in politics, culture and the development of society |
| The function or purpose of knowledge: | | |
| TO KNOW Purpose: to give man insight into the cosmos, by observation and by focusing on regularities and generalities. To understand how the world is made manifest in the form of a divine and rational order True/false | TO KNOW WHAT TO DO (KNOWING) Purpose: intervening and changing the surrounding world to make a better material life To be able to create and produce Primarily used in craft aesthetic, vocational education, development of competence Usefulness /utility | TO KNOW HOW TO DO WHAT IS GOOD Purpose: building a foundation for an ethical society Develop good judgement, act as ethical humans, citizenship Primarily used in interpretation and understanding especially in professions concerning humans |
| The activity form, or how knowledge is unfolded; | | |
| Theoria: contemplative, analytical and understanding activity to observe the world from the Gods’ angle without being involved in that which is being observed The activity is not directed towards an end but is its own goal | Poesis; The goal is outside the activity. Hence the activity is instrumental, aiming at a result/product. | Praxis; Humans meaningful and valued based activity of an ethical-social character. Not instrumental: good and just action with the aim is integrated in the action itself |
| How knowledge is learned, different areas of knowledge are learned in different ways; | | |
| Analytical and systematic principle of learning De-contextualised and de-situated learning Does not demand life experience Can be learnt in the classroom by the young | Practical knowledge based on life experience and rehearsal /repetition Learning by doing Vocational training | Practical knowledge learned by living in the world and performing social and ethical acts Be part of the moral humanity Experience, mentoring and good role-models |

Fig 4. A reading of Aristotle and presentation of his thoughts by contemporary scholars.

Comparison of the descriptors and Aristotle's concept of knowledge

At the risk of violence against Aristotle one might tentatively connect the concept in the two European and the Norwegian frameworks, with some of the characteristics of the Aristotelian knowledge field. In the basic document prepared for the Bologna Conference in Bergen, the Bologna Working Group cites the Tuning project in defining competence, and one might find some of the formulations as inspired by Aristotle:

[...] the description of competences embraces three strands, 'knowing and understanding' (theoretical knowledge of an academic field, the capacity to know and understand), 'knowing how to act' (practical and operational application of knowledge to certain situations), 'knowing how to be' (values as an integral element of the way of perceiving and living with others and in a social context). (Bologna Working Group on Qualifications Frameworks, 2005, p. 41)

Having in mind that according to Aristotle and the modern scholars who draw on his epistemology, there are no clear boundaries between forms of knowledge – they overlap – one could try to place QF in the chart as proposed over. The EQF-concepts *knowledge*, *skills* and *competence* have seductive similarities with the Aristotelian *episteme*, *techne* and *phronesis*. The documents leading to QF, the definitions in the Bologna framework and the EQF division of knowledge into three strands inspired me to see if there was a relationship between the frameworks and the Aristotelian forms of knowledge. The five Bologna descriptors are more problematic than those of EQF. One may argue that 'knowledge and understanding' fit well with the concept of *episteme*, just as 'applying knowledge and understanding' match *techne*. 'Communication skills' might be described as practical knowledge and therefore be affiliated to *techne*, or on the other side, as it is also strongly tied to 'being' and to act or live in the world with others, it could be linked to *phronesis*. 'Learning skills' also could be placed otherwise as it is a prerequisite to be able to acquire all types of knowledge. Having sound judgment is a kind of practical knowledge with similarities to the Aristotelian *phronesis*.

| Aristoteles | | |
|--|--|---|
| Episteme | Techné | Phronesis |
| FQ - EHEA | | |
| Competence defined by the Tuning project as | | |
| <i>theoretical knowledge of an academic field, the capacity to know and understand</i> | <i>'knowing how to act' (practical and operational application of knowledge to certain situations),</i> | <i>'Knowing how to be' (values as an integral element of the way of perceiving and living with others and in a social context).</i> |
| FQ – EHEA: Dublin descriptors (my attempt to label the descriptors) | | |
| Knowledge and understanding | Applying knowledge and understanding Communication skills Learning skills | Making judgements |
| EQF | | |
| Knowledge Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the EQF, knowledge is described as theoretical and/or factual. | Skills [.] „Skills“ are described as “the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)”. | Competence [...], „competence“ is referred to as “the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the EQF, competence is described in terms of responsibility and autonomy |
| NKF (Citations from the Norwegian referencing report, 2011) | | |
| <u>Kunnskap</u> [...] proposal knowledge „ <i>kunnskap</i> “ is defined as the “theories, facts, terms, principles and procedures within a discipline, field, academic area and/or a vocation, profession or work situation.” | <u>Ferdigheter</u> [.] „skills“ are referred to as „ <i>ferdigheter</i> “, and described as “the ability to apply knowledge to solve problems and complete tasks. There are various types of skills – cognitive, practical, creative and communicative skills.” | <u>Generell kompetanse</u> In the NKR proposal the following description is used: “ <i>Generell kompetanse</i> is the ability to apply knowledge and skills in an independent way in various situations through showing the ability to cooperate, to take responsibility, the ability to reflect and think critically in study and work situations.” |

Fig. 5 Table with Aristotelian forms of knowledge vs the three qualification frameworks.

NKR defines knowledge in relation to what is learned as well as the learning process involved, and reference is made to “understanding” as the basis for acquiring knowledge (The Norwegian referencing group, 2011). In NKR the requirement of what knowledge, skills and general competence a candidate should have, is combined with a description of how the owner of this knowledge, these skills and general competence should demonstrate it.

The descriptor combines a prescription of what something is, with how to measure whether “this” is, that is, the criteria for assessing whether a candidate has an expertise, and how he or she can demonstrate it. Some examples (2.Cycle): “-has advanced knowledge in the field and specialized knowledge in a particular area” (knowledge), but then “-can apply knowledge in new areas in the field” (knowledge) and “-can analyse academic issues based on subject area's history, traditions, character and place in society” (knowledge).

Secondly, several of the descriptors in the Norwegian framework might change label from ‘knowledge’ to ‘general competence’ or ‘to skills’. It may be argued that the descriptor “has insight into relevant academic and professional ethical issues” should be moved from general competence to ‘knowledge’, but there is also argument for leaving the descriptor where it is, as it might be regarded as relevant for normative and ethical-political conduct. But in an Aristotelian framing, having knowledge does not secure right and just acts; you might have knowledge but still not be wise. The descriptor “can plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles” (1.cycle, competence), does have clear skill components, but also emphasises the social-ethical aspect, hence it could be under both banners. While the descriptor “can reflect upon his/her own academic practice and adjust it under supervision” (1. cycle, skills) this may also might be placed both as theoretical knowledge and as competence, the same could be said regarding the descriptor “can manage complex interdisciplinary assignments and projects” (3.cycle, general competence), while “can formulate problems, plan and carry out research and scholarly and/or artistic development work” (3.cycle, skills) is much akin to “can participate in debates in the field in international forums” (3.cycle, general competence). It appears to be quite randomly under which banner the descriptors are categorized, and several of the descriptors might without any problem fit into all three categories.

Finally: the utility perspective is dominant, and it seems striking that the description under general competence does not have ethical-political and value-related content (phronesis), but rather technical-practical (techne). Especially the utility aspect is apparent under general competences; there are few reminders of Aristotelian wisdom, and management and communication skills are especially emphasized. Also, there are very few traces of Aristotelian techne and phronesis (as outlined by modern scholars) in the skills- and general competence descriptors; they are almost solely describing cognitive and meta-cognitive abilities related to classical scientific knowl-

edge. All skills and competences are supposed to be articulated by words, and hence describe the cognitive skills. Descriptors supporting the two forms of practical knowledge are lacking.

Concluding reflections

One of the basic ideas of QF is to communicate the qualifications a successful completion of educational programs provides in a transparent way (Kunnskapsdepartementet, 2011a). The Qualification Framework aims at embracing all educational programmes in higher education, both classical disciplines and professional, and this demands a framework with a rich concept of knowledge that can cover both theoretical and practical interests. QF requires of educational institutions clear and well considered descriptions and criteria for assessment to justify that a candidate is certified for the qualification. The NKR has descriptors where it seems to be random under which banner they are posted, which gives a kind of blurred picture.

QF focuses on learning outcomes and serves as the basis for internal discussions on the organization of teaching, learning and assessment methods. Based on the learning outcomes, the faculty is supposed to formulate subject-specific learning outcomes and also consider which are the most appropriate teaching-learning-assessment methods. This means that if the descriptors in the three categories in the Norwegian context were better formulated, these could provide a better basis for fruitful discussions and processes in the various disciplines and programmes in Higher education institutions. This is problematic when aiming at being the basis for all curricula that the different educational programmes in Norway are supposed to draw on. A distinction between knowledge, skills and general competence that are built on both theoretical and practical knowledge forms would be a benefit. It might be a question whether the way NKR is designed helps to reach the goal: to achieve transparency, promote better communication and mobility in higher education. Rather, it hinders the implementation of the framework in individual institutions.

The framework seems clearly biased towards theoretical-scientific knowledge, that means that vocational and professional education are given a framework that is too restricted and narrow for their needs. The Norwegian descriptors seem to be stuck in a scholastic paradigm, but at the same time to be dominated by an instrumental approach. Episteme, or theoretical-scientific knowledge has traditionally been the dominating form of knowledge in academia, and different policy approaches to strengthen the utility

aspect of higher education has been criticized. The Humboldtian ideal in higher education is strong – to develop knowledge for knowledge’s own sake, free from governmental steering and not being forced to produce what is regarded as useful (Dannelsesutvalget, 2009). The qualification frameworks are in their essence instrumental: they aim at enhancing mobility among students and workers, and at communicating what an educated person “is able to do on the basis of a given qualification”. Cost-benefit and utility perspectives are dominant.

The two European Frameworks seems to allow a broader concept of knowledge than the Norwegian; the descriptors are formulated on a more general level, include both practical and theoretical knowledge and are thus more useful for both classical university studies and vocational and professional education programmes. Important aspects concerning practical knowledge are not included in NKR. The Norwegian Ministry seemed to have overruled their own idea “To avoid the implementation of the framework being a theoretical exercise, there is an emphasis on allowing the institutions to implement this in accordance with their revisions of syllabuses” (my translation). Regarding their own work on NKR, the randomly formulated descriptors and the lack of integrating practical knowledge is a barrier to being a good basis for educational processes in the institutions.

Ambiguity and lack of clarity are not desirable in political texts, and due to this, problematic issues with lots of possible contradictory interpretations might be simplified and presented as if they were unequivocal. This might be a first impression of the frameworks: they seemed transparent, orderly brief and easy to understand. But the surrounding system and political processes that led to the framework has been complicated; several scholars and bureaucrats have been working with the development of the frameworks, and by examining these texts in a historical-epistemological framework we might find that the central concepts that are building bricks in the framework are often already filled with meaning – or put differently – have other definitions than the framework propose. The texts are part of an on-going semiose; the different use and interpretation of the central concepts in this discourse shows us that this is a multi-faceted and complicated issue. Whether the texts have their intended political meaning I will leave to later discussions.

References

- Aristotle. (1999). *Den Nikomakeiske etikk*. Oslo: Bokklubben Dagens bøker.
- Adam, S. (2006). An introduction to learning outcomes: A consideration of the nature, function and position of learning outcomes in the creation of the European Higher Education Area. In E. Froment, J. Kohler, L. Purser, & L. Wilson (Eds.), *EUA Bologna Handbook – Making Bologna Work*. Berlin: Raabe Verlag.
- Adam, S. (2008). *Learning outcomes current developments in Europe: Updates on the issues and applications of learning outcomes associated with the Bologna Process*. (Bologna seminar: Learning Outcomes based higher education: the Scottish experience). Retrieved October 28, 2012, from http://www.ond.vlaanderen.be/hogeronderwijs/bologna/BolognaSeminars/documents/Edinburgh/Edinburgh_Feb08_Adams.pdf
- Becher, T. & Trowler, P. (2001). *Academic Tribes and Territories*. England: Open University Press.
- Bergan, S. (2010). Key note speech in the National conference on Qualification Frameworks in Bergen in 2010.
- Bergen – Communiqué. (2005). *The European Higher Education Area – Achieving the Goals*. Retrieved October 28, 2012, from <http://www.ond.vlaanderen.be>
- Bologna Working Group on Qualifications Frameworks. (2005). *A Framework for Qualifications of the European Higher Education Area*. Ministry of Science, Technology and Innovation, DK. Retrieved October 28, 2012, from <http://www.bologna-bergen2005.no>
- Bologna Process (On Qualification Framework FQ- EHEA). (2005). Retrieved October 28, 2012, from <http://www.ond.vlaanderen.be>
- Bologna Process Stocktaking London. (2007). Retrieved October 28, 2012, from <http://www.ond.vlaanderen.be>
- Bologna Process Stocktaking Benelux. (2009). Retrieved October 28, 2012, from <http://www.ond.vlaanderen.be>
- Bologna Process homepages. Retrieved October 28, 2012, from <http://www.ond.vlaanderen.be>
- Cedefop. (2009). *The development of national qualifications frameworks in Europe*. Luxembourg: Publications Office of the European Union. Retrieved October 28, 2012, from <http://www.cedefop.europa.eu>
- Cedefop. (2011). *Development of national qualifications frameworks in Europe*. Luxembourg: Publications Office of the European Union. Retrieved October 28, 2012, from <http://www.cedefop.europa.eu>
- Council of Europe. (2010). *Contribution of the Council of Europe to the development of the European Higher Education Area*. Strasbourg. Retrieved October 28, 2012, from <http://assembly.coe.int>

- Dannelsesutvalget. (2009). *Kunnskap og dannelse foran et nytt århundre*. Universitetet i Oslo, Universitetet i Bergen and Høgskolen i Bodø. Retrieved October 28, 2012, from <http://www.uib.no>
- Ewell, P. (2001). *Applying Learning Outcomes Concepts to Higher Education: An Overview*, Prepared for the Hong Kong University Grants Committee (NCHEMS), USA. Retrieved October 28, 2012, from http://www.ied.edu.hk/obl/files/OBA_2nd_report.pdf
- Fairclough. (1989). *Language and power*. Essex: Longman Group UK Limited
- González, J. & Waagenaar, R. (2008). *Universities' contribution to the Bologna process. An introduction*. The Tuning project, Universidad de Deusto, Bilbao.
- Grimen, H. (2008). Profesjon og kunnskap. In J. Molander & L. J. Terum (Eds.), *Profesjonsstudier* (pp. 71-86). Oslo: Universitetsforlaget.
- Gustavsson, B. (2000). *Kunnskapsfilosofi*. Stockholm: Wahlström & Widstrand.
- Gynnild, V. (2011). Kvalifikasjonsrammeverket: Begreper, modeller og teoriarbeid. *Uniped*, 34(2). Oslo.
- Karseth, B. (2008). Qualifications frameworks for the European Higher Education Area. A new instrumentalism or "much ado about nothing"? *Utbildning & Demokrati*, 17(2), 51-72. Örebro Universitet.
- Kunnskapsdepartementet. (2007). *Forslag til nasjonalt rammeverk for kvalifikasjoner i høyere utdanning*. Rapport fra en arbeidsgruppe. Retrieved October 28, 2012, from <http://www.regjeringen.no>
- Kunnskapsdepartementet. (2011a). *Høring – Nasjonalt kvalifikasjonsrammeverk for livslang læring* (NKR). Retrieved October 28, 2012, from <http://www.regjeringen.no>
- Kunnskapsdepartementet. (2011b). *Nasjonalt Kvalifikasjonsrammeverk for livslang læring* (webpages on NKR). Retrieved from October 28, 2012 from <http://www.regjeringen.no>
- Mitchell, M. (2006). *Michael Polanyi, the art of knowing*. Wilmington, Delaware: ISI Books.
- NOU 2000. *Frihet med ansvar. Om høgre utdanning og forskning i Norge*. 14. Oslo.
- The Norwegian referencing group. (2011). *Referencing the Norwegian Qualifications Framework (NKR) levels to the European Qualifications Framework (EQF)*. University of Oslo. Retrieved March 23, 2012, from <http://www.nokut.no/>
- Nyborg, P. (2001). *The Quality Reform of Higher Education in Norway- A national reflection of the Bologna Process*. Retrieved March 23, 2012, from <http://www.see-educoop.net>
- Polanyi, M. (1983). *The tacit dimension*. Gloucester, Mass.: Peter Smith.
- Ryle, G. (1945). Knowing How and Knowing That: The Presidential Address. *Proceeding of the Aristotelian society, New series*, 46(1945-46), 1-16. Blackwell Publishing.

- Saugstad, T. (2005). Aristotle's Contribution to Scholastic and Non-Scholastic Learning Theories. *Pedagogy, Culture and Society*, 13(3).
- St.meld. nr. 27. (2000-2001). *Gjør din plikt – Krev din rett. Kvalitetsreform av høyere utdanning*. Oslo.
- Stanford Encyclopedia of Philosophy: *Wittgenstein* (Article). Retrieved October 23, 2012, from <http://plato.stanford.edu/entries/wittgenstein/Tjomsland>, M. (2004). *Internationalization at Norwegian universities and colleges after the Quality Reform*. Bergen: Stein Rokkan Centre for Social Studies UNIFOB.
- van Dijk, T. A. (1977). *Text and context: explorations in the semantics and pragmatics of discourse*. London: London Linguistics Library.
- Wodak & al (2000). *Racism at the top: parliamentary discourses on ethnic issues in six European states*. Austria.
- Wodak, R. (1996). *Disorders of discourse*. London: Real language series. Longman.

Attachments

- Attachment 1. FQ/ EHEA, Dublin Descriptors
- Attachment 2. European Qualification Framework (EQF)
- Attachment 3. The Norwegian Qualification Framework (English)
- Attachment 4. Det norske kvalifikasjonsrammeverket for høgre utdanning (NKR) (Norwegian)

Attachment 1. FQ/ EHEA, Dublin Descriptors

Qualifications that signify completion of the higher education short cycle (within or linked to the first cycle) are awarded to students who:

- have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;
- can apply their knowledge and understanding in occupational contexts;
- have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;
- can communicate about their understanding, skills and activities, with peers, supervisors and clients;
- have the learning skills to undertake further studies with some autonomy.

Qualifications that signify completion of the first cycle are awarded to students who:

- have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;
- can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;
- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;
- can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;
- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

Qualifications that signify completion of the second cycle are awarded to students who:

- have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;
- can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
- have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;
- can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non specialist audiences clearly and unambiguously;
- have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

Qualifications that signify completion of the third cycle are awarded to students who:

- have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
- have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
- are capable of critical analysis, evaluation and synthesis of new and complex ideas;
- can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;
- can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.

Attachment 2. European Qualification Framework (EQF)

| EQF Descriptors (EU) | Knowledge | Skills | Generic competences |
|-----------------------------|---|---|---|
| EQF 5 th cycle | Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge | A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems | <ul style="list-style-type: none"> - Exercise management and supervision in contexts of work or study activities where there is unpredictable change - Review and develop performance of self and others |
| EQF 6 th cycle | Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles | Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study | <ul style="list-style-type: none"> - Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts - Take responsibility for managing professional development of individual and groups |
| EQF 7 th cycle | <ul style="list-style-type: none"> - highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research - critical awareness of knowledge issues in a field and at the interface between different fields | <ul style="list-style-type: none"> - specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields | <ul style="list-style-type: none"> - manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches - take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams |
| EQF 8 th cycle | <ul style="list-style-type: none"> - knowledge at the most advanced frontier of a field of work or study and at the interface between fields | <ul style="list-style-type: none"> - the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice | <ul style="list-style-type: none"> - demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research |

Attachment 3. The Norwegian Qualification Framework (English)

A candidate who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Level 6: Bachelor (1. cycle)

| Knowledge | Skills | General competence |
|---|--|--|
| <ul style="list-style-type: none"> - has broad knowledge of important topics, theories, issues, processes, tools and methods within the academic field - is familiar with research and development work in the field - can update his/her knowledge in the field - has knowledge of the history, traditions, distinctive character and place in society of the academic field | <ul style="list-style-type: none"> - can apply academic knowledge and relevant results of research and development work to practical and theoretical problems and make well-founded choices - can reflect upon his/her own academic practice and adjust it under supervision - can find, evaluate and refer to information and scholarly subject matter and present it in a manner that sheds light on the problem - masters relevant scholarly tools, techniques and forms of communication | <ul style="list-style-type: none"> - has insight into relevant academic and professional ethical issues - can plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles - can communicate important academic subject matters such as theories, problems and solutions, both in writing and orally, as well as through other relevant forms of communication - can exchange opinions and experiences with others with a background in the field, thereby contributing to the development of good practice - is familiar with new thinking and innovation processes |

Level 7: Master (2. cycle)

| | | |
|--|--|--|
| <ul style="list-style-type: none"> - has advanced knowledge within the academic field and specialized insight in a limited area - has thorough knowledge of the scholarly or artistic theories and methods in the field - can apply knowledge to new areas within the academic field - can analyze academic problems on the basis of the history, traditions, distinctive character and place in society of the academic field | <ul style="list-style-type: none"> - can analyze and deal critically with various sources of information and use them to structure and formulate scholarly arguments - can analyze existing theories, methods and interpretations in the field and work independently on practical and theoretical problems - can use relevant methods for research and scholarly and /or artistic development work in an independent manner - can carry out an independent, limited research or development project under supervision and in accordance with applicable norms for research ethics | <ul style="list-style-type: none"> - can analyze relevant academic, professional and research ethical problems - can apply his/her knowledge and skills in new areas in order to carry out advanced assignments and projects - can communicate extensive independent work and masters language and terminology of the academic field - can communicate about academic issues, analyses and conclusions in the field, both with specialists and the general public - can contribute to new thinking and innovation processes |
|--|--|--|

Level 8: Ph.d. (3. cycle)

| | | |
|--|---|--|
| <ul style="list-style-type: none"> - is in the forefront of knowledge within his/her academic field and masters the field's philosophy of science and/or artistic issues and methods - can evaluate the expediency and application of different methods and processes in research and scholarly and/or artistic development projects - can contribute to the development of new knowledge, new theories, methods, interpretations and forms of documentation in the field | <ul style="list-style-type: none"> - can formulate problems, plan and carry out research and scholarly and/or artistic development work - can carry out research and scholarly and/or artistic research work of a high international standard - can handle complex academic issues and challenge established knowledge and practice in the field | <ul style="list-style-type: none"> - can identify new relevant ethical issues and carry out his/her research with scholarly integrity - can manage complex interdisciplinary assignments and projects - can communicate research and development work through recognized Norwegian and international channels - can participate in debates in the field in international forums - can assess the need for, initiate and practice innovation |
|--|---|--|

**Attachment 4. Det norske kvalifikasjonsrammeverket for høgre utdanning (NKR)
(Norwegian)**

| En kandidat med fullførte kvalifikasjoner skal ha følgende totale læringsutbytte definert i kunnskap, ferdigheter og generell kompetanse | | |
|---|---|---|
| Kunnskap | Ferdigheter | Generell kompetanse |
| Bachelor (1. syklus) | | |
| <ul style="list-style-type: none"> - har bred kunnskap om sentrale temaer, teorier, problemstillinger, prosesser, verktøy og metoder innenfor fagområdet - kjenner til forsknings- og utviklingsarbeid innenfor fagområdet - kan oppdatere sin kunnskap innenfor fagområdet - har kunnskap om fagområdets historie, tradisjoner, egenart og plass i samfunnet | <ul style="list-style-type: none"> - kan anvende faglig kunnskap og relevante resultater fra forsknings- og utviklingsarbeid på praktiske og teoretiske problemstillinger og treffe begrunnede valg - kan reflektere over egen faglig utøvelse og justere denne under veiledning - kan finne, vurdere og henvise til informasjon og fagstoff og framstille dette slik at det belyser en problemstilling - kan beherske relevante faglige verktøy, teknikker og uttrykksformer | <ul style="list-style-type: none"> - har innsikt i relevante fag- og yrkesetiske problemstillinger - kan planlegge og gjennomføre varierte arbeidsoppgaver og prosjekter som strekker seg over tid, alene og som deltaker i en gruppe, og i tråd med etiske krav og retningslinjer - kan formidle sentralt fagstoff som teorier, problemstillinger og løsninger både skriftlig, muntlig og gjennom andre relevante uttrykksformer - kjenner til nyttenkning og innovasjonsprosesser |
| Master (2. syklus) | | |
| <ul style="list-style-type: none"> - har avansert kunnskap innenfor fagområdet og spesialisert innsikt i et avgrenset område - har inngående kunnskap om fagområdets vitenskapelige eller kunstfaglige teori og metoder - kan anvende kunnskap på nye områder innenfor fagområdet - kan analysere faglige problemstillinger med utgangspunkt i fagområdets historie, tradisjoner, egenart og plass i samfunnet | <ul style="list-style-type: none"> - kan analysere eksisterende teorier, metoder og fortolkninger innenfor fagområdet og arbeide selvstendig med praktisk og teoretisk problemløsning - kan bruke relevante metoder for forskning og faglig og/eller kunstnerisk utviklingsarbeid på en selvstendig måte - kan analysere og forholde seg kritisk til ulike informasjonskilder og anvende disse til å strukturere og formulere faglige resonnementer - kan gjennomføre et selvstendig, avgrenset forsknings- eller utviklingsprosjekt under veiledning og i tråd med gjeldende forskningsetiske normer | <ul style="list-style-type: none"> - kan analysere relevante fag-, yrkes- og forskningsetiske problemstillinger - kan anvende sine kunnskaper og ferdigheter på nye områder for å gjennomføre avanserte arbeidsoppgaver og prosjekter - kan formidle omfattende selvstendig arbeid og behersker fagområdets uttrykksformer - kan kommunisere om faglige problemstillinger, analyser og konklusjoner innenfor fagområdet, både med spesialister og til allmennheten - kan bidra til nyttenkning og i innovasjonsprosesser |
| Ph.d. (3. syklus) | | |
| <ul style="list-style-type: none"> - er i kunnskapsfronten innenfor sitt fagområde og behersker fagområdets vitenskapsteori og/eller kunstneriske problemstillinger og metoder - kan vurdere hensiktsmessigheten og anvendelsen av ulike metoder og prosesser i forskning og faglige og/eller kunstneriske utviklingsprosjekter - kan bidra til utvikling av ny kunnskap, nye teorier, metoder, fortolkninger og dokumentasjons-former innenfor fagområdet | <ul style="list-style-type: none"> - kan formulere problemstillinger for, planlegge og gjennomføre forskning og faglig og/eller kunstnerisk utviklingsarbeid - kan drive forskning og faglig og/eller kunstnerisk utviklingsarbeid på høyt internasjonalt nivå - kan håndtere komplekse faglige spørsmål og utfordre etablert kunnskap og praksis på fagområdet | <ul style="list-style-type: none"> - kan identifisere nye relevante etiske problemstillinger og utøve sin forskning med faglig integritet - kan styre komplekse tverrfaglige arbeidsoppgaver og prosjekter - kan formidle forsknings- og utviklingsarbeid gjennom anerkjente nasjonale og internasjonale kanaler - kan delta i debatter innenfor fagområdet i internasjonale fora - kan vurdere behovet for, ta initiativet til og drive innovasjon |

This article has been subject to blind review.

Principal's Leadership through Perspectives on Person, Profession and Position

Siv Saarukka, Åbo Akademi University, Finland

In this article I present the findings of research into the leadership and management of full time principals in Finnish comprehensive schools. The intention for this study is to investigate principals' leadership through the perspectives of person, profession and position in order to analyze the consequences of a lack of detailed national regulations about school principals. The overall aim is to investigate principals' awareness of leadership opportunities according to the mandates for school leadership. Data is collected through interviews transferred to narratives and analyzed as life stories. The results show that implications concerning principals' awareness about significant issues in their leadership have been established. Self-knowledge as a personal trait is recognized and grounded in the leadership role. The lack of detailed regulations opens for principals' educational professionalism and autonomy in leadership as a profession. Conditions for the leadership position are related to time and experience, and signs of quality outcomes are evidence of applying leadership practice wisely.

Key words: Principal, Leadership, Self-Knowledge, Profession, Position

Introduction

The origin of this article is the formal assignment of school leadership in Finland and its influence on leadership in practice. The national legislation acts mandate that “the principal is responsible for school operations” (Act 628/1998). The brief formulation of the mandate indicates that on the national level Finland has relinquished overall national steering of school

leadership. This fact and its effects, challenges and opportunities for principals are in focus in this article. The lack of detailed general instructions communicates opportunities for developing leadership according to contextual needs. The open instruction leaves open a number of possibilities in practicing and developing the leadership role. It creates the potential to develop personal skills and leadership strategies, as well as insights into how to develop qualities in the leadership profession and position.

This article is guided by three motives. The first is to recognize the principals' self-knowledge (i.e. good understanding of own thoughts, feelings and abilities) according to personal traits as components in leadership, the second is to analyze principals' perception of leadership as a profession and professional development, and the third is to view principals experiences about leadership as a position and analyze if principals are able to identify development and transition in the leadership role according to time and experience.

The motives are conducted by the fact that lack of general instructions according to the mandate of principalship opens up broad views of challenges and opportunities in educational leadership practice. According to experiences from several years of being in charge of conducting leadership studies for aspiring principals, the motives are also partly based on a personal interest.

The qualification of the principal is defined by the special Decree on Qualifications for Personnel in the Provision of Education. The qualifications include the Master's Degree, a teacher's qualification for the corresponding school level, sufficient work experience as a teacher and the education administration certificate given by The National Board of Education, or at least 25 ECTS of university studies in educational administration, or a sufficient knowledge in educational administration acquired in some other way (Act 986/1998).

According to the mandate, the principal has a legal position in terms of leadership. Educational tasks conducted through the curricula and decentralization in school management has expanded the principal's responsibilities and the demands of the profession (Risku & Kanervio, 2011). Principals in Finland are required by law to have been teachers themselves and they must continue to be engaged in classroom teaching. The school leadership role is either a fulltime profession in leadership or a part time job with full time teaching and part time principalship. In the first case a person applies for a fulltime leadership position, and in the second case a person who has applied for a teacher's job accepts being a principal as part time job. In both cases principals have to be engaged in classroom teaching; as a

full time principal at least 4-5 hours, and as a part time principal up to 20 hours of lessons per week.

The lack of general legislation about school leadership in Finland opens up challenges of freedom for the principal as a person, for the leadership profession and the principal's position in creating successful educational leadership and supporting quality learning outcomes. To be aware of oneself as a person, to be able to recognize leadership as a profession and to have insights into the consistency of the leadership position are incontrovertible realities in principalship. These perspectives on principals are in focus in this article, and related to the motives, the aim of this article is to analyze principals' awareness of leadership opportunities according to the mandates for principalship.

Previous research

This section consists of a brief overview of research on school leadership related to the perspectives of person, profession and position. The purpose of the theoretical orientation is to facilitate understanding of the content of school leadership according to findings presented later in this article, and its impact on the open regulations concerning operating the school.

Research on principals related to perspectives about the person

According to the aim of this article, research findings about principals and personality related attributes are limited. Research on the general level related to the person in terms of self, personality, identity, self-confidence and self-awareness (Sandvik, 2009; Uljens, 1998) uses the expressions "me" and "personality" when relating to a person's awareness about him or herself. Giddens (1991) uses the term "self-identity" to express "When something has to be routinely created and sustained in the reflexive activities of the individual." According to Branson (2010), a person's behavior is influenced by various components of the self. Increasing self-knowledge starts with self-concept, and developing processes include awareness about self-esteem, motives, values, beliefs, emotions, and appearances finally in a person's behavior, "the most obvious and undeniable component of self".

Research related to the understanding of human beings as individuals and in interaction with one another, conducted by Seagal and Horne (1997/2004) addresses the findings as follows.

All people have mental, emotional and physical capacities; these are basic threads in the human system, so fundamental and universal that we have termed them principles [...] Each of these three principles and their attributes are active in all people but to varying degrees and in varying combinations. (Ibid. p. 26-27)

| Mental principle | Emotional principle | Physical principle |
|------------------|----------------------|---------------------|
| Thinking | Feeling | Making |
| Objectivity | Subjectivity | Doing |
| Vision | Relationship | Actualizing |
| Overview | Communication | Sensory Experience |
| Structure | Organization | Practicality |
| Values | Creative imagination | Systemic Experience |

Table1. The three universal principles and their attributes. (Seagal & Horne, 1997/2004).

When aware of how the attributes are active, self-knowledge will come into sight and a developing process start.

The research field regarding a person as an individual consists of aspects concerning identity, personality, universal principles and components of the self, among many other elements. In this article the purpose is not to dig deeply into the psychological area of a human being. The intention is to obtain a view of principals' self-awareness according to personality related behavior in the leadership role.

Research on the profession of principal

Research findings on the basic elements in the profession of principal are limited according to both national and international studies. The terms profession, professional and professionalism can be found among researchers from different academic fields. In this article focus is given to aspects on profession and professionalism in relation to principal's educational leadership.

Brante (2009), states that "a profession has to include activities based on scientific research". He also points out that members of a profession share a feeling of identity, common values and have a common language. Leo (2010) discusses whether the profession of principal is professional or semi-professional, and ends up defining it as semi-professionalism, because principalship is still developing towards a classical profession according to national qualifications for the job (e.g. Sweden).

Principals motivation in the profession (Sandén, 2007) brings in educational leadership views on the profession, and research about principal as leader of the knowledge management function for the teachers in basic education (Raasumaa, 2010) points out a new perspective on leadership: being a professional educator for colleagues. Ahonen's (2008) research on leaders' identity as narrated by principals is also related to the profession.

Significant elements in the profession are the abilities to handle relationships and to use communication as a leadership tool. According to Svedberg (2000) "leadership doesn't occur in a social vacuum [...] leadership emerges as a set of social relationships." Nordzell (2007) stresses that principals leadership is to be developed by a new perspective on leadership through communication as a structured occasion.

According to Hargreaves, Halász and Pont (2007), school leadership in Finland is a paradox: principals are highly qualified in education and expected to have high status at the same time as they are practicing classroom teaching. The term paradox is a core factor when trying to understand complexity. In schools the paradox is that control and un-control exist at the same time. "Generally everyone have expectations that the principal and teachers have control over all upcoming situations in the school.[...] In reality uncontrolled situations occur all the time" (Augustinsson & Brynolf, 2009, p.47). This influences the leadership profession, and confirms that one element in the definition of the leadership profession is the ability to handle complex situations (Lind Nilsson & Gustafsson, 2006).

Ekholm (2004) states that one approach for analyzing the grade of professionalism in a profession could be to look at the phenomenon through sociological lenses. Ekholm points out five factors relevant for identifying professionalism: basic knowledge of the profession, responsibility for developing the profession, agreements on professional ethics, control over rights to practice the profession and the level of autonomy in practicing the profession (2004). Almost similar contents are presented by Ullman (1997). According to Englund (2004), autonomy is the most important criterion when search for definitions about professionalism. Principals as well as teachers experience their professionalism more strongly the more autonomously they are allowed to practice their work

Related to research cited above, and common issues identified as descriptions of profession, my operationalizing of the phenomenon is as follows: profession includes activities based on scientific research, aspects of ethic and autonomy, and responsibility to develop the profession. As specific, regarding to educational leadership: professionalism is identified as relational and communicative, and demand abilities to handle complex situations.

In this article principal's profession according to awareness of autonomy in educational leadership is one area of interest. The complexity in principalship in light of lack of national guidelines, providers' rights to declare detail instructions, and the overall pedagogical mission is demanding for principals, and will be highlighted in coming discussions.

Research on principals related to perspectives about position

The principalship is a legal position in terms of leadership, and mandate given by the provider is the fundament of the position. To fulfill the overall leadership mission, a principal has to be aware of the core curricula as well as instructions about the position.

Research on principalship as a position can be found in Finland since the 1980s, but a significant increase in research studies on principals during the first decade of the 2000s can be noticed. This fact is to be related to changes in the formal position of school principals. According to Risku and Kanervio (2011) and Aho, Pitkänen and Sahlberg (2006), the change can be described as follows.

The role of school principals has dramatically changed since 1990. Principals are not only the educational leaders of their schools but managers who are responsible for financing, personnel, and the results of their institutions. Previously a school principal was an experienced senior teacher who was promoted for good service to education. Today's school principal must be a qualified leader who understands educational development and has solid management skills to lead a school. (Ibid. p. 119)

Finnish research findings are generally related to perspectives on position: areas of issues on leadership, educational development, the leadership profile of principals, visions of leadership and principal training (Tukiainen, 1999; Taipale, 2000; Kirveskari, 2003; Kuukka, 2009; Pesonen, 2009). The principal's formal position is experienced as being framed by everyday management routines and challenges to develop skills in order to be a responsible leader of the school. The position invites a situation of managing independently, but taking in account the provider's policy and strategies. The degree of autonomy varies because of differences in local authority policy.

Changes in the formal position in school leadership have dictated most of the research motives. The changes are connected to the effects on leadership according to the lack of regulations. This situation opens up a broad area

of responsibility in the leadership position and awareness about challenges, limits and potential. To be able to handle the responsibility increases all the contents in the leadership role (Mäkelä, 2007).

The leadership position rests on a high level of autonomy and a principle of subsidiarity; it means that decision-making is moved to the level most able to secure implementation in practice. This fact and the lack of regulations indicate that experience in leadership is crucial for the position (Lehkonen, 2009).

A brief view of research on principals across the European community (Johansson & Bredeson, 2011) shows that studies on school principals represent a rather new field in educational research. Reasons for the limited research are explained by differences in each country, and related to how the political, social and educational development in Europe has emerged. In German speaking countries, historically there has not been much research on school leadership, whereas in England there is a longer history of research on school heads. School leadership is for the moment an emerging field of study, supported by education reforms that have intensified the principals' work and responsibility.

Majority of research areas are related to normative and descriptive fields and concepts of instructional leadership has so far only limited traction. According to Johansson and Bredeson (2011): "The traditional role of principals is in transition – being reshaped, redefined and re-negotiated" when looking across European countries.

To sum up: This section is presenting a brief review of previous research about perspectives on person, profession and position related to principalship. According to the findings, there are a number of studies related to the position. Research about principals' traits, personality issues and behavior is limited, but findings on inner threads in the human system view elements for a deeper understanding of the person as well as analysis of components increasing self-knowledge. The profession of principal is complex and there have been only a few findings from basic research defining the profession according to school principals.

According to findings mentioned above, principalship seems to be a profession in transition, and research about today's requirements concerning person, profession and position might be needed in a near future. Findings presented in this article might contribute to the development of a broader view of educational leadership and its contents.

Research questions and methodology

As related to the motives for this study, the intention is to investigate principals' leadership through the perspectives of person, profession and position, in order to analyze principals' awareness of leadership opportunities according to the mandates for principalship.

The research questions in detail are as follows.

1. What is the nature of principals' self-knowledge?
2. What perceptions do principals have about leadership as a profession?
3. What is the experience of principals of the leadership position?

The research design is qualitative and based on a narrative approach framed by hermeneutic theory. The ontology is the school leadership in reality as narrated by a group of principals. According to Johansson (2007) narratives are accepted as basic factors expressing knowledge about the social reality. Epistemology in this study is based on principals professional experiences collected through interviews. Kvale and Brinkmann (2009) stress that philosophical aspects can be raised on knowledge based on interviews because of contextual issues according to language, life stories and relations.

Through interviews transferred to narratives the intention in this study is to interpret the principals' statements in order to achieve an understanding of them, and to investigate the qualitatively different ways in which people experience something or think about something (Ricoeur, 1995). The research focus is on human experience as narrated by principals, and on analyzing the knowledge about educational leadership and aims expressed in research questions through the narratives.

The sample consists of seven principals from comprehensive schools in the Swedish speaking area of Finland, geographically located on the west coast, and southern part of the country. All principals' works as full-time school leaders. Contact was made through e-mail, with a brief description of interview proceedings and question about acceptance to participate. The research process started with an interview, conducted in Swedish language and lasting approximately two hours, it was audio taped and later transcribed into a narrative by the researcher. The narrative was sent back to the participant to ensure that there was no misinterpretation of data or facts in the process of translation. All informants were given a new and neutral

name. After confirmation from the research participant, the narrative was ready for analysis.

The knowledge and experience recounted by principals belongs specifically to the research field of social constructivism, where knowledge is created through meanings, experiences and values in social contexts and formed in social interaction (Kvale & Brinkmann, 2009).

| Principal | Years as principal | Number of students/ staff | Grade |
|-----------|--------------------|------------------------------|-----------|
| Albert | 10 | 250/35 | Secondary |
| Ellen | 10 | 240/30 | Secondary |
| Erik | 14 | 520/75 | Secondary |
| Esther | 12 | 220/28 | Secondary |
| Lovisa | 11 | 240/32 | Secondary |
| Maya | 14 | 230/35 | Primary |
| Sven | 13 | 250/38 | Secondary |

Table 2. List of participants in research group.

Findings about person, profession, and position

A variety of expressions about experiences, strategies, leading challenges and individual reactions and solutions emanated from the interviews with the principals. Based on the principals' life stories as school leaders verified in findings in previous research, it can be claimed that school leadership is a complex profession and leadership actions are conducted by educational frames of national curricula, and that influence from municipalities as the main providers of public services is significant and highly affects principalship. When investigating the narratives, similar patterns illuminating person, profession and position became visible despite individual differences in the expressions.

The three major findings according to research questions are described in the following sections.

The nature of principals' self-knowledge

The principals had no problem identifying their personal traits and the importance of personal strengths in their leadership. Both strengths and weaknesses were identified and expressed through personal comments. In the following some descriptions are selected as excerpts from narratives.

Albert describes himself as calm and diplomatic; he has humor and is standing with both feet on the ground. Albert's traits that fit well in his leadership style are humor and diplomacy. He claims to be sensitive and have a strong intuition that he relies on in his leadership.

Maya identify herself as a person with a happy and joyful mind, although she also can be serious. She is vibrant, confident in herself, has a tendency to develop trust, and sees herself as a person who can be trusted. She can also be persistent and stubborn. Maya's ability to prioritize and avoid being easily influenced and affected has changed with increasing experience.

Esther describes herself as versatile, energetic, competitive and impatient. She has a great ability to see the overall view, and her feelings are often fluctuating. She thinks she has the personal qualities needed in school leadership

According to the principals' expressions about themselves as individuals it can be noticed that the ability to identify personal traits is quite good. In relation to the knowledge about basic threads in human dynamic processes, principals' self-knowledge includes expressions that can be identified among the emotional, mental and physical principles and their attributes (Seagal & Horne, 1997/2004; Saarukka, 2012).

The principals are able to express themselves in characteristics demonstrating how basic threads in personality are visible in their leadership role.

Sven states that he has ambitions and activities to fulfill; he is good in translating plans into actuality and does not like to leave initiatives half finished. (Physical + mental attributes)

Albert has strong intuition, helping him to deal with growing dilemmas. He has a very relational connection to his colleagues, and prefers to practice his leadership in a policy of open-ended problem-solving. (Emotional+ physical attributes)

Maya sees herself as participative and communicative and identifies herself as a person easy to establish confidence with as well as trustworthy. (Emotional attributes)

Lovisa describes herself as objective and receptive. She can look at activities and people from a distance perspective and work with whole systems. Lovisa identifies her need for developing a stronger personalized communication. (Physical + mental attributes)

Esther is good in adapting systemic issues; she is open to challenges and risks, and able to see emerging possibilities. She is good with structures and timelines and identifies herself as very good in motivating her colleagues. (Emotional + physical attributes).

The subject in qualitative interviews is a human being and her/his relation to her/his life. Through interview a researcher can interpret the meaning of essential issues in a life story. According to the principals' personal reflections, self-knowledge is on a good level, but could be developed. None had any difficulties expressing personal issues or qualities about themselves. Comments from principals in this study expressing that "through formulating a personal description one get new aspects about oneself" verify that from an interview the informant can obtain new knowledge and discover new aspects of him or herself. (Kvale & Brinkmann, 2009).

Principals' perception about leadership profession and professional leadership

As viewed in the section previous research, definitions about principalship as a profession in terms of an independent issue is not clearly revealed in research findings formulated in basic definitions. Related to earlier research and findings in this study, a profession is relational, communicative and complex, and it takes time to create a professional identity.

Principals practice their profession as leaders in schools as professional organizations that consist of professionals, i.e. teachers. The profession of teacher is characterized as skilled according to learning issues and subject teaching. Research comparing leadership in Nordic schools states that principalship is not a popular profession because "all followers are their own professionals" (Kolam & Ojala, 2001). This fact might be one of the components causing complexity in principalship.

The profession of principal generally expressed by informants in this study is "to practice leadership in school as a socio-cultural organization". In this section principals' opinions about educational leadership as a profession and practiced as professional leadership is presented. The findings

focus on autonomy, neutrality and identity as common results from analyzing the narratives.

Autonomy in the leadership profession is high according to the context and mandate for Finnish principals. This is also confirmed in this study. Expressions about professional leadership related to autonomy as excerpts from the narratives:

Sven: I feel safe and secure in my leadership, I can make independent decisions.

Albert: I'm very satisfied in my leadership role. I'm the "captain of the ship", and I have enough power.

Lovisa: I like to work alone, my work is very independent, I can delegate work if necessary.

Esther: I am free to create visions, it's my duty to be a road pointer, a pilot and an opinion maker.

Erik: It's my duty and challenge to create cooperation among my staff, I have to create the structures for our whole system and I have to negotiate with politicians about money and resources.

Principals' professional leadership is also based on their personal ability to handle relations (Ciulla, 2011). According to professional leadership, the perspectives of person and profession are closely connected. Professional leadership also includes the capacity to identify expectations from the staff and to be aware of how to choose activities in relation to the professional development of teachers (Raasunmaa, 2010).

In this study, findings about the need for principals to act neutrally in relation to staff members is underlined as important, and expressed by all participants. Below are some excerpts from narratives as examples:

Maya: I can't be a close friend with anybody in our school, I must be equal friendly with all.

Erik: I must act very objectively in all internal relations.

Albert: A principal must treat all equally, not show any special feelings to anyone in the staff.

The identity of a principal is closely related to professional leadership. The leadership identity is sometimes compromised by the identity as a teacher, especially in Finland, where principals also have to teach classes. Despite Ahonens' findings (2008), the double role of being both teacher and principal was not mentioned as a problem by anybody in this research. According to the number of years spent in the leadership profession, all informants expressed confidence in their leadership role as well as support and legitimacy for leadership by practicing the teachers' role. This finding should be noticed as an example of developed professional leadership.

Principals' experiences about the leadership position

The aim of this section is to find a structure to indicate how principals have developed their leadership through the years in the leadership position, as well as identifying what changes in managing leadership tasks principals are able to express.

According to the interviews, the analysis focuses on (a) how principals did act when new in the leadership position, (b) how principals experienced their position in the present situation, and (c) how principals look at their leadership position and the future of the school. The analysis focuses on school leadership as a developing process related to three time dimensions: the past, the present and the future. As an overarching perspective the principal's life stories indicate evidence of developmental changes in the leadership profession and position.

Principals ways of acting when new in the leadership position

All the informants had at least 10 years of practice as a school leader, and none had any problem remembering the first year as a principal. A broad variety of pre-opinions about the content of principalship could be noticed. A common experience was that content in the early stage of leadership comprised managing daily practice, and taking care of activities running the school as an organization. A summary of experiences of the principals' first time in the leadership position is expressed in the interviews as follows:

The challenge was to manage everyday work and learn the overall responsibility for the school (Albert, Maya).

The leadership was much more paperwork than expected (Sven, Erik, Esther).

The challenge was to find a balance between educational/instructional leadership and management (Erik, Ellen, Sven).

It was hard to be a young principal among older colleagues in one's former school (Maya, Esther, Albert).

I experienced a certain status in the role, but loneliness in the position (Esther, Lovisa, Ellen).

Human relations in a school are a big challenge and unexpected relational situations occurred (Lovisa, Erik).

According to the findings, it can be noticed that when new in the leadership position, the principal's main question is "what has to be done?" in order to manage everyday routines. Questions about how to manage in the leadership position, or what type of leadership should be practiced, does not have high priority for a principal when new in the position.

Principals recognizing their present leadership position

According to the principals' evaluation of their leadership at the present moment, a development about how to handle the position is obvious. Through experience the leadership position has become familiar and strategies about how to practice the profession have developed. Working independently and recognizing autonomy in leadership have developed an awareness of how to identify relevant strategies in the position. Security about decision-making processes and confidence in relational issues are some of the components involved in building strength in the leadership position.

Principals have come to accept the complexity of their position. According principals' experiences of providers, parents, teachers and students who each have their opinions about education and school policy, principals express their self-confidence and self-awareness in the leadership role as follows.

Albert: I feel confident and secure in my leadership. I have developed a sense of the "right time" when it comes to strategic initiatives.

Ellen: I'm able to handle everyday challenges and I feel safe in the position as responsible for the school.

Lovisa: When everyday routines are under control, I have time for policy making and educational development

Sven: Awareness of how I can practice different types of leadership, e.g. distributed leadership and instructional leadership is proof of my professional development in relation to the position.

Maya: When being confident in my leadership roles I can wait for the right moments to take initiatives.

Among the principals in this study, autonomy in the leadership position varies in relation to different contents in the position decided by the provider. Finances, resources and money-making are areas where the provider's regulations differ. According to information given in interviews, e.g. Erik has total responsibility for the budget in his school, and Ellen, Sven and Esther are responsible for the budget excluding salaries for staff and finances for properties.

The narratives confirm principals' broad responsibilities in the position as well as nuances in autonomy concerning administration and pedagogy. Principals experience their profession and position as rather complex but have developed abilities to handle occasional situations and act strategically. The findings confirm that every day is filled with unexpected occasions outside their control, as shown by results from previous research (Augustinsson & Brynolf, 2009). According to development in leadership roles principals' sayings express awareness about "how to do" as well as "when to do" as proved by excerpts above. When leaders are allowed to interpret information and make independent decisions the competence to lead a complex reality is engaging and constructive. Success in the leadership position is based on experience and a growing awareness about limits and autonomy, as expressed by the informants in this study. The lack of detailed regulations is a support for principals' professional development in the leadership position.

(c) Views about development in principal's leadership

Principal's self-reflections about the past and the present in their leadership career highlight the fact that experience from practice is an important educative process. The principals in this study express that they feel secure in their leadership role. They can motivate and describe the 'what' and the 'how' and also the 'when' in educational processes at school. These

attained leadership qualities could be referred to as 'wisdom' according to Branson (2010). Branson points out, in accordance with Strom (2007), that three qualities can be expected when wisdom influences the leadership processes:

- Wise people read life and its patterns well.
- Wise people apply these insights skillfully to the choices at hand
- Wise people act with integrity and care (Ibid. p.29)

Principal's life stories related to experience in the leadership position provides proof that leadership activities are grounded on quality and wisdom:

I feel safe when making educational and administrative decisions as well as solving conflicts and dealing with problems (Sven, Maya).

Challenges from outside school are demanding and I have to be aware of how to prioritize (Erik, Ellen, Albert).

We are creating the future. We work continuously with knowledge, skills and values needed for the present and future. (Esther, Lovisa)

During their time of leadership practice and experience as educational leaders, principals have developed their skills and abilities and reached wisdom in their leadership. The type of leadership practiced among the informants in this study could be identified as related to transformational leadership. Northouse (2010) gives the following description of transformational leadership:

Transformational leadership is a process that changes and transforms people. It is concerned with emotions, values, ethics, standards, and long-term goals. It includes assessing followers' motives, satisfying their needs, and treating them as full human beings [...]. It is a process that often incorporates charismatic and visionary leadership. (Ibid. p. 171)

The fact that the national curriculum is the frame for Finnish principals' educational leadership demands the ability to achieve both long-term goals and visionary leadership. The principals' comments in this study reflect an awareness of overarching responsibility for fostering and education.

Lovisa is concerned about students' motivation and the need for foste-

ring them to take responsibility and to be aware of common values in society.

Albert underlines the challenge to develop educational contents and methods to keep up students' motivation for higher education.

Erik stresses the role of the school as an environment for learning and developing skills for the future, and underlines the principal's duty to be aware of the school as a whole system, and create it wisely in order to fulfill the goals of education.

To sum up the principals' opinions about the leadership position: The professional development process is obvious according to the principal's perceptions about early leadership (what) and present leadership (what + how). The lack of regulations creates opportunities for creativity, engagement and strategic development of the leadership role (what + how+ when). Accordingly, the developmental process in the leadership position could be defined as a process of how to lead the school wisely.

Discussion and conclusion

This article presents an investigation of principals' awareness about leadership opportunities according to the mandates for school leadership. The context is Finnish comprehensive schools.

The motives, as expressed in the introduction, was to recognize principals' awareness of personal traits in terms of self-knowledge as components in leadership, to analyze principals' perception of leadership as a profession and professional development, and to view principals' experiences about leadership as a position and find out if principals are able to identify development and transition in the leadership role according to time and experience.

The aim was divided into three research questions focusing on (1) the nature of principals' self-knowledge, (2) principals' perception about leadership as a profession, and (3) the principals' experiences of the leadership position. The approach in this qualitative research is narrative. Research information was collected through interviews transferred to narratives. The group of informants consists of seven full time principals from comprehensive schools, primary and secondary levels.

According to research question (1) the findings from analyses of the principals' life stories provide evidence of self-knowledge concerning personal abilities and strengths. Principals are able to identify traits in personality convenient in leadership actions on a general level. Principals'

self-knowledge is experienced as important according to the freedom in the mandate. This finding supports the necessity of being aware of personal traits and capacities when dealing with challenges according to relational issues in school leadership. Awareness about personal traits and needs related to communication is not clearly identified according to the narratives. As previous research (Svedberg, 2000; Nordzell, 2007) highlights, awareness about relational issues and communication needs are fundamental in leadership.

The complexity in principalship in light of lack of national guidelines, providers' rights to declare detail instructions, and the overall pedagogical mission is demanding for principals, Research question (2) highlights the progression when moving from being a teacher to becoming a principal. As a profession, leadership is experienced as an interesting and challenging step in the career. Awareness of the complexity in the role is identified and expressed as demanding. When growing into the professional role, the development of acting efficiently emerges. According to findings, essential elements in principals' professional development are: confidence in decision making, increasing the professional leadership identity and operating with neutrality in relational roles in the school. Principals express their qualified professionalism in terms of safety when making decisions, credibility among colleagues, developing strategic thinking and planning, acquaintance with learning outcomes and awareness of responsibility for operations of the school. Awareness about autonomy in leadership was noticed in practice, but not clearly expressed as an opportunity, neither was freedom in leadership roles discussed.

According to research question (3) the leadership position is viewed from a timeline perspective. Due to findings in narratives, an obvious observation of past, present and future was identified. When new in the leadership position the main task was to manage the 'what' in schools everyday life. When more experienced, principals became aware of the 'how' and the 'when' as motives for activities and leadership strategies. The right time (when) was specially mentioned as an example of being aware of the crucial moment for initiatives. Principals were able to identify their professional development as independent decision makers and initiators; a finding of interest supporting the purpose of this study. Areas recognized for development concerns educational and instructional leadership.

The overall aim, related to the motives, was to analyze principals' awareness about leadership opportunities according to the national mandates for school leadership. The aim has been illuminated in this article through perspectives on person, profession and position. In conclusion, it can be

noticed that implications about principals' awareness about significant issues in their leadership has been established but there are still room for development. Related to the narratives it is obvious that principalship in the Finnish context has more signs of profession than semi-profession. When applying for principalship a person must have qualification for the profession, and elements in the leadership profession as formulated by Brante (2009) can be identified.

According to personal motive for this study, findings concerning communication might lead to effects when developing training programs for aspiring principals in the future, as well as studies about how to handle relational issues in principalship. The overall findings in this study will support analyzes of how to develop self-knowledge, leadership profession and principals' position according to professional development programs for principals.

Results discussed in this article are related to the mandate for principals given in the national legislation. To create a more nuanced and detailed picture of challenges and opportunities in the mandate of school leadership, components in the providers' instructions for principals has to be investigated as well as frames for principalship according to the national core curricula. Through these essential elements added to findings in this article, the overall school leadership mission will be identified and created.

References

- Act 628/1998/ Retrieved from www.finlex.fi
- Act 986/1998/ Retrieved from www.finlex.fi
- Aho, E., Pitkänen, K., & Sahlberg, P. (2006). *Policy, development and reform principles of basic and secondary education in Finland since 1968*. Washington DC: World Bank. Retrieved November 12, 2009, from <http://www.see-educoop.net/>
- Ahonen, H. (2008). *Rehtoreiden kertoma johtajuus ja johtajaidentiteetti*. Jyväskylä Studies in Education, Psychology and Social Research, 352. Jyväskylä: Jyväskylä University Print.
- Augustinsson, S. & Brynolf, M. (2009). *Rektors ledarskap – komplexitet och förändring*. Lund: Studentlitteratur.
- Branson, C. M. (2010). *Leading Educational Change Wisely*. Rotterdam: Sense Publishers.
- Brante, T. (2009). *Vad är en profession? Teoretiska ansatser och definitioner*. Vetenskap för profession. Borås: Högskolan i Borås.

- Ciulla, J. B. (2011). Handmaiden and queen: what philosophers find in the question: "what is a leader" In M. Harvey & R. E. Riggio (Eds.), *Leadership studies. The dialogue of disciplines* (pp. 54-65). Northampton. Massachusetts: Edward Elgar Publishing.
- Ekholm, M. (2004). Lärare, professionalitet och yrkeskvalitet. In C. Romilson (Ed.), *Lärarprofessionalism – om professionella lärare* (pp. 7-13). Stockholm: Lärarförbundet.
- Englund, T. (2004). Professionella lärare? In C. Romilson (Ed.), *Lärarprofessionalism – om professionella lärare* (p. 44-54). Stockholm: Lärarförbundet.
- Giddens, A. (1991). *Modernity and self-identity. Self and society in the late modern age*. Cambridge: Polity Press.
- Hargreaves, A., Halász, G., & Pont, B. (2007). *School leadership as systemic improvement in Finland. A case study report for the OECD activity improving school leadership*. Retrieved November, 15, 2012, from <http://www.bestlibrary.org/files/school-leadership-for-systematic-improvement-in-finland.pdf>
- Johansson, A. (2007). *Narrativ teori och metod. Med livsberättelsen i focus*. Lund: Studentlitteratur.
- Johansson, O. & Bredeson, P. V. (2011). Research on principals: Future perspectives and what's missing? In O. Johansson (Ed.), *Rektor – en forskningsöversikt 2000–2010* (pp. 295-308). Stockholm: Vetenskapsrådet.
- Kirveskari, T. (2003). *Visiot oppilaitoksen johtamisesta. Tulevaisuuden tahtotilaa muodostumassa*. Acta Universitatis Tamperensis 933. Tampere: Tampereen Yliopisto
- Kolam, K. & Ojala, I. (2001). Koulun johtajat ja rehtorit Suomessa. In R. Svedlin (toim.), *Koulun johtaminen pohjoismaisessa vertailussa* (pp. 89-104). Opetushallitus. Helsinki: Yliopistopaino.
- Kuukka, K. (2009). *Rehtorin eettinen johtaminen monikulttuurisessa koulussa*. Acta Universitatis Tamperensis 1435. Tampere: Tampereen Yliopisto.
- Kvale, S. & Brinkmann, S. (2009). *Den kvalitativa forskningsintervjun*. Lund: Studentlitteratur.
- Leo, U. (2010). *Rektorer bör och rektorer gör*. Lund: Lund studies in sociology of law.34.
- Lehkonen, H. (2009). *Mikä tekee rehtorista selviytyjän? Peruskoulun rehtoreiden käsitäisiä työssä selviytymisestä*. Tampere: Tampereen yliopisto.
- Lind Nilsson, I. & Gustafsson, L. (2006). *Ledarskapets inre och yttre resa*. Lund: Studentlitteratur.
- Mäkelä, A. (2007). Mitä rehtorit todella tekevät. Etnografinen tapaustutkimus johtamisesta ja rehtorin tehtävistä peruskoulussa. *Jyväskylä Studies in Education, Psychology and Social Research* 316. Jyväskylä: Jyväskylä University Print.

- Nordzell, A. (2007). *Samtalat skolledarskap. Kategoriserings- och identitetsarbete i interaktion*. Linköping Studies in Education and Psychology No. 112. Linköping: Linköping University.
- Northouse, P. (2010). *Leadership. Theory and practice*. London: SAGE.
- Pesonen, J. (2009). *Peruskoulun johtaminen – aikansa ilmiö*. Joensuu: University of Joensuu. Publications in Education N:o 132.
- Raasumaa, V. (2010). *Perusopetuksen rehtori opettajien osaamisen johtajana*. Jyväskylä Studies in Education, Psychology and Social Research 383. Jyväskylä: Jyväskylän Yliopisto.
- Ricoeur, P. (1995). *Hermeneutics and the human sciences. Essays on language, action and interpretation*. Cambridge: Cambridge University Press.
- Risku, M. & Kanervio, P. (2011). Development Plans and Research – Key Roles in Developing Education in Finland. In O. Johansson (Ed.), *Rektor – en forskningssöversikt 2000– 2010* (pp. 161-186). Stockholm: Vetenskapsrådet.
- Saarukka, S. (2012). Components influencing principals' leadership. In H. S. Larusdottir, O. H. Johannsson & B. Hansen (Eds.), *Education and Practice of School Leaders: The Ethical Dimension* (pp. 63-88). Reykjavik: University of Iceland.
- Sandén, T. (2007). *Lust att leda i lust och leda. Om rektorers arbete under en tid av förändring*. Åbo: Åbo Akademi University Press. (Diss.)
- Sandvik, M. (2009). "Jag har hittat mig själv och barnen". *Barnträdgårdslärares professionella självutveckling genom ett pedagogisk-psykologiskt interventionsprogram*. Åbo: Åbo Akademi University Press. (Diss.)
- Seagal, S. & Horne, D. (1997/2004). *Human Dynamics. A new Framework for Understanding People and Realizing the Potential for Our Organizations*. Los Angeles: Human Dynamics International.
- Strom, M. (2007). *Arts of the wise leader*. Sydney, NSW: Sophos Publications.
- Svedberg, L. (2000). *Rektorsrollen. Om skolledarskapets gestaltning*. Stockholm: HLS Förlag.
- Taipale, A. (2000). *Peer-Assisted Leadership – menetelmä rehtorikoulutuksessa*. Helsinki: Helsingin Yliopisto.
- Tukiainen, K. (1999). *Peruskoulun rehtorin toimintaprofiili*. Helsinki: Helsingin Yliopiston opettajankoulutuslaitos. Tutkimuksia 206.
- Ullman, A. (1997). *Rektorn. En studie av en titel och dess bärare*. Stockholm: HLS Förlag.
- Uljens, M. (1998) *Allmän pedagogik*. Lund: Studentlitteratur.

This article has been subject to blind review.

(Dis-)playground for (De-)signmakers @;-)

**A study of sign making and artistic expression –
from the cell phone to glass fusing**

Solveig Åsgard Bendiksen, Nord-Trøndelag University College,
Norway

Every single written artifact consists of form and content. Playing with these in the cell phone's text message system can lead to a new aesthetic space in the subject of Arts and Crafts. I am in this study exploring that space. What can be the aesthetics, materiality and meaning of these small digital written formations in this room? A cell phone can be seen as a treasure chest, a playground and a sketch book for sign makers of all ages. This article presents results from two rhizome analyses of art school pupils' and teacher students' sketching games with written artifacts in transformation processes from cell phone display via paper sheets to glass plates. The forms of written artifacts have been analyzed in a hermeneutic way, separately and totally, as small meaningful texts. The changes which can be seen in the form and content of the written artifacts in these transformation processes tell aesthetic stories from young people's lives. The sketches which are made from written artifacts on the cell phone's display are transformed to aesthetic formations when they are set in an exhibition context. The transformation processes revealed a rarely described link between the materiality of the different media, such as LCD-screen, paper sheets and glass plates, and tactility and touch, which, together with the visual system, is supposed to be the most active part of the perceptual system in the subject of Arts and Crafts.

Key words: Arts and Crafts, Cell Phone Display, Glass fusion, Aesthetic Formations, Young Students

This work is made available under a Creative Commons Attribution 4.0 International (CC BY 4.0) license. The license text is available at <https://creativecommons.org/licenses/by/4.0/>.

In the beginning

There have always been links according to the different media in the subject of Arts and Crafts. Aesthetic experiences in historical media such as clay, wood and stone have resulted in beautiful and functional artifacts. Two- and three dimensional sketching games and creative processes have often been a starting point for sketches as pictures of thoughts or drawn metaphors. The rise of digital media such as the scanner, video camera, cell phone and drawing programs, have changed and supplemented the plurality of the media in creative processes and made the subject even more multimodal.

Perhaps the door is ajar for more aesthetic learning rooms. The rooms have been hidden until the small digital displays enlightened them. Potential rooms for the subject of Arts and Crafts could be glimpsed in the light of the screens. Some time ago tentative play with known letters on a gigantic, black cell phone first took me to the antechamber for late-comers before I stumbled into a dusk-dark corridor, where frivolous, enigmatic writing formations hovered in mid-air. From one wall of the corridor small beeps sounded from self-lit micro screens in rainbow colours. Picture surfaces in the form of paper, skin, plastic, clay, glass and stone echoed from each other. Like a golden, blue-eyed boy I scurried in, pulled down the symbols of beauty and spread them out on the picture surfaces. I could cut a written character, blow on it and see it disappear; I could let it lie alone or place it together with other significant symbols. I am still in this enjoyable corridor. I see doors opening by themselves. I am a sign maker.

The sign maker's significant work

When written artifacts are composed on picture surfaces and placed in an exhibition context, the meaningful texts can be seen as aesthetic formations. The concept, written artefacts, is inspired by the philosophy of Roger Säljö in *Læring og kulturelle redskaper* (2006) [Learning and cultural artifacts], who explains human beings' external memory systems as artifacts /.../ that is, mediating tools, where, through differing techniques of inscription, people preserve information and divert their experiences outside their own body (Säljö, 2006, p. 50, my translation). He describes clay tablets, databases, books, pictures and papyrus scrolls as hardware with great capacity and durability as tools that are thought out, communicated and worked with (Säljö, 2006, p. 51). With the help of inscriptions one can objectify one's own experiences through signs, symbols and other mediating tools. Objectivity implies that ideas become fixed as pictures

in human experiences, Säljö says. Texts are fixed written constructions and always artistic productions Hans Georg Gadamer writes in *Truth and Method* (Gadamer, 2010, p. 221). A written artifact is, as I see it, developed as a separate tool of communication without the tangibility three-dimensional objects possess. It carries a mental multidimensionality despite a handwritten or rolled out and printed appearance. When written artifacts are combined, the written viewpoints become formations, which, in turn, become aesthetic in new contexts. The essence of the written artifacts as carrier of content- and form potentially opens multidimensional rooms for sign makers of different ages. And we are all sign makers according to Gunther Kress in *Multimodality – a social semiotic approach to contemporary communication* (2010). Kress has a social semiotic perspective of the creation of significance. Significance is created in social contexts. His theory has three principal components, which consist of firstly the semiotic resources, secondly, what can be expressed by means of them, and thirdly, what interpretation and diffusion potential they may have (Kress, 2010, p. 34). Multimodality refers to the ways of expressing oneself through combined systems of symbols, or modal ensembles. A modality is a representative expression. Monomodality is the opposite of multimodality and has influenced the Western school with isolated systems of symbols: the science of language studies language and the science of music studies music. Web technology has increased the consciousness of the totality of the systems of symbols. Cultural technologies such as speech, writing, sound, picture and movement admit mirroring, responses, instructions and actions and touching, while imagination and inner pictures hold sway on the mental level. Cultural technologies have codes which are read differently. A silent picture is perceived, decoded and read aesthetically, technically and materially in another manner than a living picture, where movement, sound and text are part of a continually changing process. The readings are characterized by visible and invisible cultural codes, which constantly become new symbols. Communication is a semiotic task where the worker, or symbol maker, makes use of tools. Just as keyboard and pencil are tools, so every single sign and symbol is a human-created tool which is used for inscriptions in the mediating process, as also Säljö explains written objects. Both Säljö and Kress say that meaning is the goal of all communication. Signs project meaning through metaphors, which sign makers have differing consciousness of. New meanings constantly arise when metaphors are understood. Meaning takes on a fixed or fluid form (Kress, 2010, p. 108). When the meanings are sharpened, discourse arises; they are dissected and overlapped and move away. Move-

ments between similar media are called transformation. Meanings also move across the modes. This movement of meanings is called transduction.

Digital caresses

The form and content of written artefacts, which are transformed from the cell phone's text message service, via handwritten signs on paper drafts to new aesthetic written signs on picture surfaces in a glass fusion technique, was investigated in *Sign of the times* (Bendiksen, 2004). Four eight-year-old girls from a municipal art school participated in organised workshops. In parallel to this, I explored my own creative work in the study as an equivalent process. The compositions in written signs are brought to visibility by the sign makers and start in the cell phone's default store of signs. In our transformation process I imagine that the cell phone's store of signs is a treasure chest for the sign maker's aesthetic learning processes. Written signs that arrange themselves in order on our small screens are like caresses.

The cell phone – a semiotic treasure chest

In accordance with other digital devices, this treasure chest is home for written artefacts such as numbers, symbols, letters and notes, which are accompanied by light, sound and movement. Even if something in the form and content of the written signs is constant, it appears as if they are always in motion. The SMS service on the cell phone can move to the outer extreme of the written signs as rough-hewn haiku-like compositions or give life to new smileys. The smileys made of symbols and written signs are referred to as ASCII-art (American Standard Code for Information Interchange) and can also set emotions in swing. They make me think of hieroglyphics, which are also stylized segments of human beings, animals, plants or objects which are recognisable and readable.

The storage possibility of the cell phone takes care of objective, ambiguous, ugly, sweet, exciting SMS's, which are saved because they mean something. On the screen, they can be reduced so that only the most meaningful written artefacts remain. Similarly to haiku poems, the reduction in the number of signs will increase the value of the remainder. The screen becomes a little sketch pad that can compose signs regardless of time and place. The overall spread makes it suitable as a creative treasure chest in the subject of Arts and Crafts.

The digital letter

SMS is certainly the grandchild of the handwritten letter. The text message is composed with the help of the writing symbols hidden beneath the screen's surface. Here they are, ready to be mobilized on the "pixel page" and placed automatically in a linear sequence. The screen letter is delivered by an invisible letter-dove which places it in the inbox and leaves behind an envelope symbol. The envelope protects private content, which is unknown until the envelope is opened. Sound, light and movement activate the telephone when the letter is delivered to the inbox. The moment before the envelope is opened is filled with curiosity and expectation. Opening an SMS can be compared to opening a present.

The parallel aesthetics of display and glass

Material similarities are perceived between the display and the medium of glass. The discovery of the cell phone as a creative tool and participation in several workshops to learn about heat-formed glass was enlightening. The similarities are obvious, with the cell phone in one hand and fresh glass mosaic pictures in the other.

Pixels and grids

Similarities in the construction of the cell phone display and glass picture in mosaic technique can be seen. At the beginning of the millenium the screen pixels were large and easily seen, and truly resemble the squares in the glass mosaic. The smiley's shiny glass chips resemble the haiku words on the screen's grid. The grid is described as flat, geometric and systematic. It gives no hiding places, says Rosalind Krauss (Krauss, 2002, p. 9). And the picture surface is – superficial. Mosaics are systematic and patterned picture surfaces which are repeated evenly in stone or glass (Jahr, 1999, p. 11). Both grids are picture surfaces where written artefacts are chips which depict meanings. There is a constantly aesthetic transforming process in the content and form of the written signs and on the picture surfaces. Form, colour and composition are especially active aesthetic means in both.

The visual similarity between the screen and the glass mosaic picks up speed with the discovery of mirror glass as a multidimensional mounting surface for glass pictures. The mirror glass background makes the written symbols expand inwards in the mirror glass. The interpretation possibilities of the glass picture gain multiplicity. This was not visible before the

glass picture, by chance, was placed upon a mirror surface in order to see the signs in another light. The effect was demonstrated well in Kgl8's glass picture, where her play with the question mark here acquires a holographic effect. The same effect as the mirror gives the glass picture can also be perceived in an SMS. This becomes a rewarding impression, since most cell phones presently appear to have LCD, liquid crystal display, consisting of two polarizing plates with a layer of liquid crystals between them. An electric current is sent through the liquid crystals and unites them so that light cannot pass through. Every crystal functions as a portal that either allows or blocks light. Crystal is a solid substance where atoms, molecules or ions are systematised in a repeating pattern in all spatial dimensions (Wikipedia, 2012). Thus, fusing glass and crystal glass are related. On closer examination of the cell phone's screen, the crystals can appear as microscopic squares. Even though both glass picture on the mirror and SMS on an LCD are two dimensional surfaces, they can have multidimensional characteristics. So the beautiful metaphor of the liquid crystals from the LCD – vocabulary leads my thoughts to the mounting process of a glass picture. Heat-formed glass is liquid also. The bottom three millimetre thick “puzzle plates” are covered with three millimetre thick “puzzle chips”, melting and flowing before they fuse together and cool to a frozen fixation. Behind the screen's protective cover bath liquid crystals appear almost like holographs on the grid's composite pixel surface. This leads one's thoughts to other composite picture surfaces, like the compound eye of a dragonfly. This is a mosaic in a pattern of light and dark hexagons, which can recall the honeycomb of bees. Dragonflies see everything! Even at night this eerie, winged helicopter creature sees with its metallic and light reflecting eyes.

To the eye, the screen and the glass mosaic are glossy and shiny picture surfaces that open up for multidimensional reflections and mirroring. Even though both surfaces reflect light from both outside and within, it is only the glass that is completely transparent. Nevertheless, the display can give the appearance of transparency. Apparently, there exists an ambiguity in the screen. Transparency arises when light waves pass through the apparatus so that the background can be seen (Wikipedia, 2012.). The screen lights up and signals activity when the phone is in use. The light on the cell phone's screen comes from within. It appears as though the crystals glitter and reflect. Imagine the signs flowing under the surface of the screen like a river of crystals, while they wait to climb up to the surface of consciousness as meaningful signs.

Incorporated in the knowledge of the media, the tactile feeling is hidden. The visual is, of course, easier to spot. The science of touch and of commu-

nication through touch is called haptic and is a part of the perceptual system, where also the visual system belongs (Gibson, 1966). Especially hands and fingers are the body's tools when media and artefacts are researched. The sense of touch is implied in this communication (Wikipedia, 2012). The feel of smooth, soft, cell phone plastic keys is different from the feel of paper, but resembles the feeling of touching the surface of glass. These feelings also probably have similarity with touch-screens. The tactile is important in the same way as the visual in the arts and crafts as well as in life. This sense is often used in connection with three dimensional sculptures. Pictures are usually not allowed to be touched in an exhibition context. The materiality which resides in the picture is, therefore, unknown for others except the artist. The tactile is subdued, but impressions and bodily memories are usually present in touch and play a role. The keyboard, or touch screen, has a shiny surface. The connection that arises between the fingertips and the keys can supplement the multimodality in transformation. There can be a multi-importance hidden in texting and typing. The media's multi-materiality might be one of the areas that make transformations important.

Sketching games

Sketching became a playful approach in the transformation process. Play is associated with childhood and adult free time and can be defined as movement play, construction play, role play and rule play in the educational context; forms of play that occur in keeping with the child's increasing age. This is a narrow definition. Play is a life form which characterizes everything living, explains Gadamer in *Truth and method* (2010). Nature also plays. Think of the *aurora borealis* and the lapping of the waves, rustling leaves and fishes jumping. Play is something that happens when we understand something. For humans it is a bodily activity which happens in the invisible realm that surrounds the game. The game is characterized by a spontaneous flighty expression that constantly changes in the space between the players. New patterns are created every time they play. The players commit themselves, are stimulated and participate in the game's seriousness. In the game we forget ourselves. We step outside ourselves and open ourselves. Play is risky, full of conflicts, tensions and opponents. This leads to genuine experiences and changes; we grow in play, and it pushes us further on new imaginary journeys, dreams, games. In Gadamer's universe, experience and education are intertwined, and within the German word for experience, *Erfahrung*, is the idea of a journey. Through play and art we

travel within ourselves. Play characterizes art. Gadamer investigates what processes happen when the work of art initially meets us half way. Art will tell us something about the reality of the world we live in, it will be read and understood. Something in art is recognisable and enriching, it leads to constantly shifting horizons, says Gadamer. Through art we understand ourselves. To create we must play and be played with.

To sketch is to practise something. A rough copy is also a sketch. A sound draft, a movement sketch – these airy, quick rasps and scratches come from the symbol maker's bodily hiding places. Parallel to doodling in the medium, sketching also happens as the activity of the thoughts, not insignificantly all forms of creative activity. *Screen sketches* are made up of play with written signs on the cell phone; they are composed on the aesthetic backdrop of the screen surface and are lifted up to the surface because they have a beautiful form or clever content. Because written artefacts are so small and slender there is something locked over the typed dialogue. Concurrently, the screen sketches are displayed in a common ideas service. The typed written artefacts are in contrast to the illuminated grid and create a linear rhythm in significant miniature compositions. As Gadamer points out, play can take on ever new forms in the area between players. The ambiguity of the symbols is part of the charm in screen play. Cell phones with separate screen and keyboard make the keyboard just as important as the screen. Cell phones with touch screens of course lead to almost similar plays. Only one's fingertips are used for typing. There is no variation in pressure on the typing keys; typing meets very little resistance from the apparatus.

Paper sketches get a graphic appearance with dark written formations against light writing surfaces. The written artifacts (be consistent – artefact or artifact) of the sketches are more durable because they are written with felt-tip pen. When the format of text messages on the cell phone screen is so small, the paper sketches do not press up in a large format; meanings do not need size. Mini-sketches are suitable, about five centimetres in height and breadth is perhaps enough. Form, composition and text are central here, not colour. Sketches can be created in express tempo and appear almost identical. The tempo in the sketching may increase or decrease. It is not so easy to say when the sketching process is over since the final sketch is based on intuition. The rhythm in the sketching may follow natural recurrences in the body. Every finger on the hand is used to hold the felt-tip pen. The grip on the drawing implement can be hard or light. The variation in grip gives the variation in expression. The meeting between hand, paper and felt-tip gives the sign maker a certain resistance.

Glass-sketches are the third method of sketching. Glass bricks are composed of glass plates and the size, form and colour are taken into consideration. Where the signs are composed on the glass plate is important. The background to the picture must hold the written signs in place. The bricks are laid tightly into each other and are variants of the written signs that were composed on the screen and the paper. The bricks can be moved and placed in new combinations again and again in the course of the play. The size of the bricks determines how many letters remain on the glass plate at the end. Ideas can be picked up by seeing what the others are doing. New ways of making the picture beautiful are perceived in one's thoughts. The sketch process on the glass plate is as short lived as the screen play is before the signs are stored. Since the glass pieces are not permanently mounted to the underlay plate, surface changes can be made. The furnishing of a glass picture can take place anywhere on the plate. However, usually the artist starts in the left-hand corner and moves towards the right in the same manner as writing in Western culture. Another variant is starting at the centre of the picture surface and placing the bricks around in ever widening circles or placing them freely and easily, seemingly aimlessly, and seeing what happens. The glass bricks can be varied endlessly before they are sealed to the glass plate. The use of colour is tempting when it comes to glass. Colour symbolism can easily be overlooked when there are so many colours to choose from. All the transparent and opaque coloured surfaces that appear apropos glass fusing – this is like entering a sweet shop. It resembles falling in love.

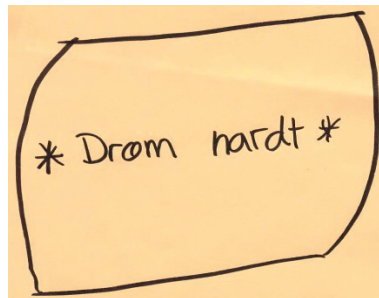
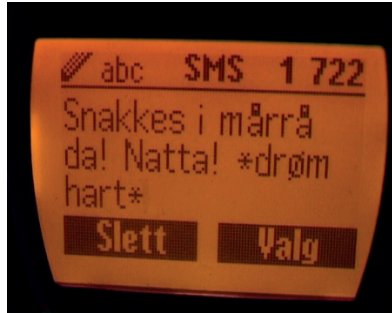
Freedom and playfulness characterize all sketching methods and there is excitement connected to changes in the written signs in transformation in the various methods.

A rhizome analysis with a hermeneutic view

According to Gilles Deleuze and Félix Guattari (2004), the term rhizome opens for multiple, non-hierarchical entries and exits in data representation and interpretation. Deleuze describes a rhizome as an “image of thought” which mirrors a botanical root system in a never ending story. The following rhizome analysis therefore has no starting and ending points and is characterized like a nomadic system of growth and propagation, always volatile, always moving, always inter-being.

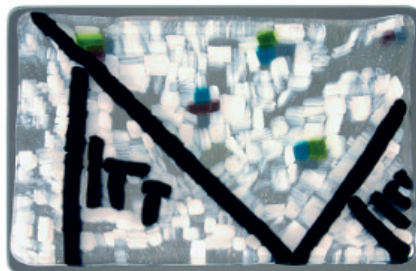
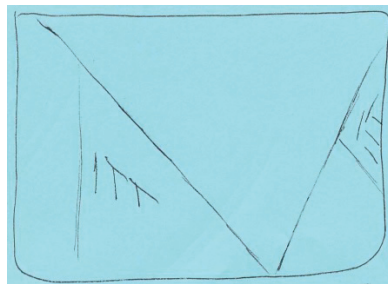
Sign of the times

Examples of transformation processes:



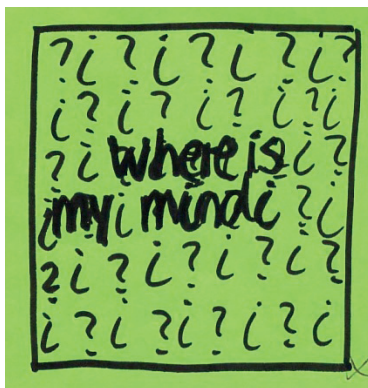
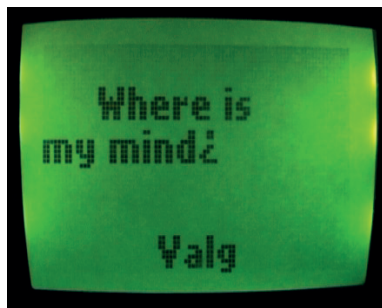
Picture 1

In the interview Rg18 says that she did not work so much with the form of the symbol on the cell phone, but that there is *//..a much more exciting thought than that the symbols should absolutely mean something. You can do what you want with them and be bound up in what a symbol means, but that it is something good, a form.*



Picture 2

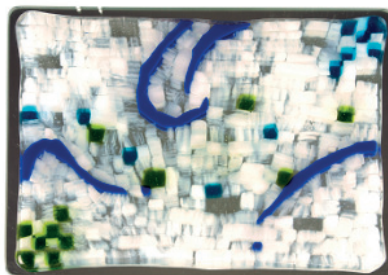
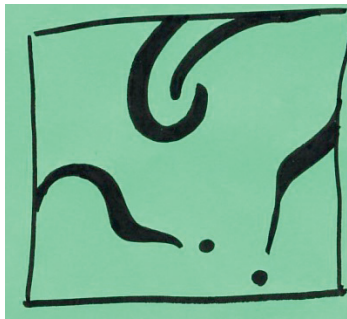
Tg18 investigates her nick-name, TITT-TITT, with which she signs her text messages. In the paper sketch she discovers that the diagonal stroke over the T's looks like the rear side of an envelope and says that this gives the picture a double meaning as letter and self-portrait. The difference between working on the display, paper and glass lies in the composition of the glass picture, she believes. //..*You get a quite different experience from looking at the glass picture; in the SMS it is just straight across: TITT-TITT, but on the glass picture it can be associated with different places, the symbols acquire new meaning.*



Picture 3

Kg18 works with the question mark and the song title *Where is my mind?* She starts by looking at all the symbols on the cell phone, writes them on a sheet of paper, and decides on the question mark because she can then //..make something of the question itself. She turns the question mark on its head, just like Spanish language does, when she works with the cell phone

sketches and the rotation follows on into the transduction; she feels it gives anticipation to the expression. She shifts much //..round about with the written symbols on the display before she decides where the question marks look best. //..The cell phone symbols are a bit square, have a determined size and everything is rather severe. With glass you can do what you want, stretch a letter. You decide yourself. You are free.



Picture 4

Sg18 works with only one symbol's form because she *//..has more room on the screen then*. She discovers that much can be done with letters and their meaning because *//..you can develop them and investigate them on glass, and then the symbols become something more than sending a symbol in an SMS*. The question mark *//..has a nice form, a fine bow*, and the symbols become more *//..alive in glass, where they get //..more and //..other forms set in new contexts*.

About aesthetics, materiality, meaning and aesthetic formations

Rg18 says that working with the form of symbols is more exciting than just working with the content of the symbol; she sees the symbols as lovely forms. In terms of form, the context is seen as diagonal lines above the T's which are changed to become the back of an envelope. This is Tg18's significant discovery. Kg18 describes play with the symbols on the cell phone as a composition game where she moves the symbols around before she makes up her mind. She describes the difference between the grid forms of the digital signs as compared with the signs she forms in glass, where she can change the form of every single sign. Sg18 chooses the question mark because the form of the sign is attractive. She trims and enlarges it at the same time as she breaks with the linear composition which the display sets up.

The transformations take place in several areas. The individual sign is transformed when it is pushed into text surfaces with different material. The sign's power inhabits the signs regardless of their physical size on the screen where the typing game started.

A clear change is seen in the outward format, from the microscopic picture surface of the display via small paper sketches to glass pictures in approximately A4 format. The need to economize with the number of written artefacts is easy to see. If the text message is too long the number is reduced to isolated signs. As the examples show, only one or a few motivating signs remain on the glass pictures. It appears that the consciousness around each individual sign's significance and form increases. This selection may stem from technical and motor challenges in cutting such small formats in an unaccustomed medium. The need for text reduction so that each individual sign becomes more strongly charged, the awareness of the time involved in making a glass picture, and a creative freedom that grows in transformation characterizes the sketching games.

The screen, the paper and the glass have their own materiality. While the screen and the paper are well known surfaces, glass is still undiscovered for these girls. The tension that arises in dealing with new media can be important.

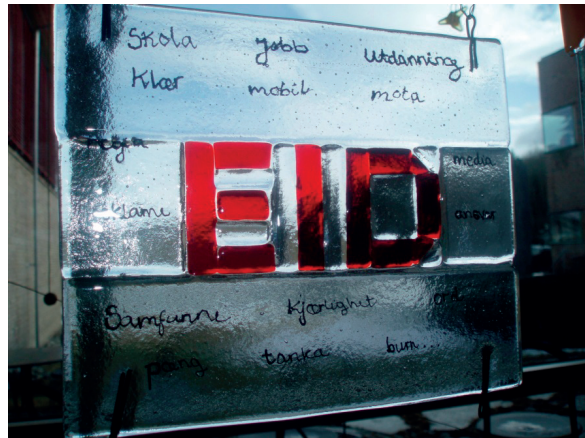
The transformations end in an exhibition. Even though the whole process is displayed, the glass pictures are seen as the end result, and it is these that are read as aesthetic formations. Nevertheless, it is interesting to see the changes which have come about in the signs' leap between media. The mirror surface that forms the pictures' backdrop lifts the glass pictures forward as aesthetic formations, and this mounting increases the similarity with the original text message. The screen's shiny pixels respond to the materiality of the mirror and the glass; it seems that the multidimensionality of the written artefacts increases. Aluminium bails are mounted behind the mirror surfaces and cause the pictures to stand out about five centimetres from the exhibiting wall. The glass pictures come towards the viewer; they become close at hand, just as the typing on the cell phone once was. The lighting mounted straight above the pictures causes the light to flow through the transparent glass picture. This gives an almost luminous effect and increases the similarity with the screens where they are illuminated. In an otherwise dim exhibition room the glass pictures illuminate themselves.

The certainty that the glass picture can be read in an exhibition appears to influence the formulation of the glass pictures. It seems important to disclose something, but not too much of one's self. *Dream hard, Titt-Titt, Where is my mind?* are strong and meaningful pictures that must be read in a youthful context.

As I understand it, to dream hard is an encouragement to realise one's dreams. If one thinks hard enough, dreams can be fulfilled. The text is bedded on a starry sky as an unending place for dreams. The nick-name, Titt-Titt, refers to childhood's playful era, from small children's hide-and-seek with grown-ups to a desire to be seen. In connection to the envelope symbol, the picture gains a double base. The white envelope covers the picture surface, while the text conforms to the envelope's sloped closing flap. As understood, the envelope is a symbol for unopened letters. In this picture letter Titt-Titt gives a little wave, the envelope increases the expectation of opening the letter and finding signs which maybe lead to Titt-Titt. *Where is my mind?* is a picture that opens for meaningful readings. The title is a philosophical question at the same time as the viewer herself can speculate: where is my mind and where do I have my thoughts? The repetition and pattern formation of the question mark that lies behind the text underlines the wondering which each question mark can evoke. The picture asks an

even more open question. It can mean that it sets a question mark beside several unknown areas in life. As distinct from *Where is my mind?*, the question mark is played with and cut into; the blue question marks form swaying and playful formations.

Below are examples of glass pictures from the student exercise *Digital letters*, where screen sketches and paper sketches also are used as bases. The exercise is a continuation of the experiences in *Sign of the times*.





These sign makers have discovered other possibilities in the transformations. The mirror background is absent. Light and perforation show the possibilities which can exist in working on the back of the picture. A tactile surface comes into sight on burning at a low temperature, and a meaning-saturated youth-culture expression appears as a shout. The first example shows a glass picture based on a word play around a poster text which existed in the 1970's. The poster *Why?* was a political statement against the Vietnam war. The text is furnished with a counter question: *why not* and, together, they can be read as optimism and hope. To send a question in return and see something from the opposite angle gives new perspectives and possible solutions. The text is formed from fusing wire placed between two glass plates, and the puzzle pieces are large in red, yellow and green transparent glass. The student wants to find a light source which comes from within, so that the light lifts the symbols from the screen. The effect is obtained by perforating a baking powder treated copper plate. The holes can be associated with the screen's pixel surface. Myhre chooses three symbols from the cell phone's store: R, @, and S, which are formulated on separate glass plates linked together by thin glass stems. The picture is fused at a low temperature so the red glass points on the surface become tactile touch points. Because she chooses red opaque glass for the signs, these become readable contrasts to the red transparent background plate. The text is coded in the student's language and can give meaning separately and together, as initials, for example. It can be understood as an avalanche of warm feelings or as a flow of ideas. Sandvik's text takes its starting point

in a typical youth-culture saying: to feel oneself “owned” or steered by something or someone. The three written artefacts are centred as main text, while the words *school, job, education, clothes, cell phone, fashion, society, love, thoughts* and *house* hover around on the picture surface. These give the feeling of being owned by the expectations of the future. Together, the texts can be understood as meanings in a youth cultural context. The picture’s texts circle around dreams, play and wondering: hope and future plans formulated at an age where many important decisions are made. Existential questions such as who am I, what will I do with my life and where do I have my thoughts need to be asked in order to find a form of meaning in life. In spite of the demand for decision, it can mean much to retain one’s childhood nick-name even if the age of majority is passed. In the midst of all this perhaps hard dreams are a necessity.

The end?

In the course of the years during which these projects evolved I started to miss handwriting.

Cell phone typing, mouse movement and use of the keyboard may have contributed to a nimbleness of finger different from that which is used for handwriting. To write with a pen and on a keyboard are two divergent processes in relation to simultaneity. Handwriting constitutes a tactile meeting between the hand, the writing implement and the medium and leaves behind analogous marks on the paper while the writing takes place. Digital writing has simultaneity both on the keyboard and on the screen. In spite of the possibilities of choice that the digital tool gives, there is little similarity of formulation between the keyboard's block letters and those that jump forth on to the screens, in another place than where they are typed in. What is going to happen with pencils and personal handwriting in the future?

It is in the outer zone of *Sign of the times* and *Digital letters* that the doctoral thesis *Are you experienced?* has emerged. I have developed writing workshops, or so called tactile meetings, where three- to five-year-olds, materials and hand implements meet. Here, small sign makers can write their autonomous writing on writing materials with hand instruments that give differing resistance. I examine the aesthetic formations of these written signs, register the fine motor hand grip and hunt for possible hybrid signs from these children’s intercultural written artefact repertoires. Because the written language tradition wanders through the generations and the children have different ethnicity, the parents are an important reference group

and have the offer of participating in the workshops. Video film, log, interview and exhibition are collection methods in this art based research project. When the sign makers' written artefacts are made visible in a display context, they will, in the same way as with the transformations in the two other projects, emerge as aesthetic formations.

New rooms

As Kress says, it can appear that the awareness around new systems of signs has given new perspectives on communication. As I have experienced, the cell phone gives possibilities that few other digital tools do. The spread and the format make it convenient and available. As a treasure chest for written artefacts, the screen's small text surface can lead to creative processes in every subject. In the curriculum for knowledge promotion (LK06), the use of digital tools is one of five skills in every subject. Recently, I tried out the exercise "Glasspartitur" (Glass score) for music teacher students. I now have proof that musical sign makers can compose and improvise from a graphic score they themselves have formulated in glass; it is possible to play a picture and do transductions in several modes, of course. Among many other interdisciplinary minded artists, the painters Paul Klee (1879-1940) and Vasilij Kandinskij (1866-1944) worked in the intersection between paintings and music.

Many significant choices are made in the course of a transformation process. The aesthetic choices around the written artefacts and the composition of a picture take place in a continually meaning-concentrated process. It is easy to forget that the materiality of the medium and the tactile feel which is hidden in the medium can give aesthetic experiences that influence the creative process. Because of the cell phone's proximity to the body, the written formations can also be seen as quite directly derived from the body. There are clear meanings that emerge in the given examples. Without the stamp of prying the written formations can be read as significant contemporary pictures from a quite private sphere.

Kress highlights the picture medium as the fastest expanding of the cultural methods of expression. But written symbols follow. E-mail, Facebook and SMS can be examples of the renaissance of written symbols.

It is unknown whether this corridor has an end, but I have my doubts. Doors still stand ajar. I have been into some of the rooms. And there are more doors to open. Now I have captured written symbols over a long period of time. I have ventured into many tactile encounters. Perhaps it is nostalgic to cling to handwriting. But compared to ready typed written

artefacts handwriting tells more personal stories than ready typed writing does. The handwritten signs are alive.

People are The DeSigners. We juggle with symbols from differing media and supplement with ever new signs from the private sign universe and make new signs in never ending stories. Sign makers never rest. Even in sleep surrealistic beings arise like formations in colourful slow motion. They are the meaningful and meaningless signs from waking life.

References

- Bendiksen, S. Å. (2004). *Tegn i tiden*. Notodden: Høgskolen i Telemark.
- Deleuze, G. & Guattari, F. (2004). *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Athlone Press. (First published in French 1980, in English 1987; translated by B. Massumi.)
- Gadamer, H-G. (2010). *Sannhet og metode – grunntrekk i en filosofisk hermeneutikk*. Oslo: Pax Forlag.
- Gibson, J. J. (1966). *The senses considered as perceptual systems*. Boston: Houghton Mifflin Company.
- Jahr, M-C.(1999). *Stilig og enkel mosaikk*. Oslo: Boksenteret.
- Krauss, R. (2002). *Avantgardens originalitet og andre modernistiske myter*. Oslo: Pax forlag.
- Kress, G. (2010). *Multimodality – a social semiotic approach to contemporary communication*. New York: Routledge.
- Säljö, R. (2006). *Læring og kulturelle redskaper*. Oslo: J.W. Cappelens forlag.
- Wikipedia. (2012). *Paul Klee*. Retrieved January 13, 2012, [no.wikipedia.org/wiki/Paul Klee](http://no.wikipedia.org/wiki/Paul_Klee)
- Wikipedia. (2012). *Vasilij Kandinskij*. Retrieved January 13, 2012, from no.wikipedia.org/wiki/Vasilij_Kandinskij
- Wikipedia. (2012). *Krystall*. Retrieved January 13, 2012, from no.wikipedia.org/wiki/Krystall
- Wikipedia. (2012) *Transparens*. Retrieved January 13, 2012, from no.wikipedia.org/wiki/Transparens.
- Wikipedia. (2012) *Taktil*. Retrieved April 20, 2012, from sv.wikipedia.org/wiki/Taktil

Photos reprinted with permission.

This article has been subject to blind review.

Entrepreneurship in Translation: From a Techno-economic to an Educational Context

Dag Ofstad, University of Nordland, Norway

This article focuses on the concept of entrepreneurship, which, during the last 20 years, has undergone a translation process and a change of meaning from techno-economic, via a political to an educational context. The purpose of this article is to go deeper into the “history of impact” of the entrepreneurship concept. In dialogue with some few thousand pages of texts, pre-understanding, prejudices and some experiences of my own, I have studied the phenomenon entrepreneurship, how the translation process has progressed and some of the implications it faced during the implementation of the concept into the education context.

Key words: Entrepreneurship, Translation process, History of Impact, De-Contextualisation/Contextualisation.

Introduction

The concept of entrepreneurship has been known to the modern world for at least three centuries. In this period it has been a very powerful and dynamic concept within the economic context and has played a key role as one of the major forces in economic development. My intention with the article is to bring into focus the exciting multi-step history to tell about entrepreneurship from the mid nineteen eighties up to our time. The concept went through a de-contextualisation process within the economic context in the nineties, transferred via actor network organisations like epistemic community networks, was contextualised again, translated, and

put into practice as we entered the new millennium, in a completely different environment than the original, namely the educational context. The research question posed for this explorative study is: How could this kind of silent educational revolution happen? How could an economic approach to teaching and training so heavily influence the didactic methodologies in the Norwegian school system, considering that the professions that became overruled in this process were the powerful professions of teachers and educators?

Based on a broad-spectrum approach, my specific aim is to problematize the discourse of entrepreneurship. For the purpose of reaching a broader overview and a deeper understanding of the evolutionary processes the entrepreneurship concept has undergone in the last decades, I have used both a historical, sociological and organisational mind-set.

These processes are studied in the light of the optics the German philosopher Hans Georg Gadamer has provided the reader with through his hermeneutic theory. My aim has thus been to investigate and articulate the entrepreneurship concept's history of impact. Furthermore, I have chosen to search for some answers by studying the dynamics of epistemic community networks, governments, systemic constitutions and innovation as sociological systems and linked this to the special branch of organisational theory known as translation theory, with inspiration from pragmatism (Røvik, 2009). It should also be said that I am not only looking into how these translation processes seem to be in progress, but also give some inputs into how these could be promoted and focused.

Entrepreneurship as macro arena

A glimpse of the macro arena of both the term and conception "Entrepreneurship" can be found when searching on the net. Within less than a second 81.3 million hits are shown (and this amount is increasing every day). Entrepreneurship as a conception and a tool within both economy and education has become one of the major hypes of postmodern times.

Entrepreneurship in business, industry and education has during the last 10-15 years been a mainly politically focused area, aiming to make Europe more competitive towards the US and Asia. The strategies agreed upon by the European Commission at a meeting in Lisbon in 2000 emphasised the importance of strengthening people's entrepreneurial skills and energy and thereby encouraging individuals to increase business activity. The European governments wanted to promote a view, telling that it is

equally important and appropriate to make a career as a self-employed work creator as it is as being an ordinary employee (EU Commission, 2003).

In Norway, the governments since 2003 have regularly launched both strategies and action plans for entrepreneurship in education. These strategies have emphasised the importance of striving to develop a culture of entrepreneurship education in Norway. The concept entrepreneurship was to be implemented in attitude, mind-set and linked to the development of practical and action-oriented teaching methods, encouraging behaviour that promotes collaboration skills, creativity and the innovation abilities of children and adolescents. This was in turn supposed to encourage young people to have faith in their creative energy and ability to see and use local resources. By growing up as self-reliant individuals, they could create jobs and prosperity and take a co-responsibility role in the development of their communities (Kunnskapsdepartementet, Nærings- og handelsdepartementet og Kommunal- og regionaldepartementet, 2004-2008 & 2009-2014¹).

Entrepreneurship as a linguistic term

Entrepreneurship has its origin from the word *entreprendre* (French) which means go ahead, initiate, start up, boot, make up something, do something and perform. *Prendre* in French means to take. It also has close affinities with the German word *unternehmen* which means to make, do, initiate. The term's first syllable – *entre* – means the same as the English *enter*, and the neighbouring expressions *entering*, *enter into*, *introduce* and *enterprising*, which means active and entrepreneurial, which again means operational, enterprising, innovative and implementative. In some of the Nordic countries the terms are linked to entrepreneurship, for example the Swedish word *företagsam*, or Norwegian *foretaksom*, which both mean enterprising. The Danes use the term *iverksetting*, which is slightly more convenient and dynamic in the sense of effectuating/executing a start-up situation (Solstad, 2000, p. 6-30).

¹ The Government's Strategy for Entrepreneurship in Education from 2004 to 2008 and Action Plan for Entrepreneurship in Education 2009 to 2014.

Entrepreneurship as a contextual concept within economy

The concept of entrepreneurship has a history going back to the ancient and medieval worlds. From the beginning, entrepreneurship has been intertwined with the ability of capital and the risk associated with commercial ventures (Hebert & Link, 2009, p. 6).

In modern and post-modern times, entrepreneurship in the economy has, broadly stated, been heavily influenced by two scientists. The first to recognise entrepreneurship and the entrepreneur in economic theory was the Irish-born financial actor, Richard Cantillon (1680?-1734?)². Cantillon's economic theory, written down in the "Essai sur la Nature du Commerce en General", sketched the outlines of a nascent market economy, founded on individual property rights and based on economic interdependency, or more precisely mutual need – and necessity. In this market economy Cantillon recognised three classes of economic agents: (1) landowners who were financially independent, (2) entrepreneurs who were engaged in market exchanges at their own risk in order to make a profit, and (3) hirelings who forego active decision-making in order to secure contractual guaranties of stable incomes (ibid). Cantillon placed entrepreneurs as the most central economic actor of society. Entrepreneurs played multiple roles in the economic process, since they were responsible for all the production, circulation and exchange in a market economy, especially exercising business judgement in the face of uncertainty.

The second economic scientist to mention is probably the most known and influential of them all. Almost all modern theories concerning entrepreneurship take their origin from the Slovak/Austrian economist Joseph Alois Schumpeter (1883-1950). Also for Schumpeter the entrepreneur was the main instrument of change in his theories of economic development, simply the *persona causa* of economic development. He laid the foundation of the modern understanding of the concept, defining entrepreneurship as the creative response of economic development and promoted it as a basic knowledge to explain economic alteration/change. Entrepreneurship for Schumpeter was to do something new, or some things which have been done before – in a new way.

² The details of Cantillon's life and activities are rather sparse. The exact year of his birth has so far defied identification. He was a successful banker and financier, but controversy dogged him everything and even the circumstances of his death were a drama as he was killed by an angry officer whom he had discharged a couple of days earlier.

Schumpeter describes economic development as something that comes from within, which is uneven and spontaneous and gives qualitative breaks with the prevailing conditions and creating radically new conditions – and thus could be seen as something that breaks with the static equilibrium state of the economy (Elliot, 1983; Spilling, 1998, p. 15). He argued that economic development leads to growth, but economic development in Schumpeter's sense is more than pure growth. In his concept of economic growth, qualitative changes are also essential. Schumpeter was keen to develop new combinations related to production processes in industry, and to contribute to stronger growth and diversification of the economy. He introduced five strategic combination stages of industrial development, all of them having an entrepreneurial function: the introduction of new products (ideas), the introduction of new production methods, the introduction of new markets for old existing products, utilization of new raw materials or semi-finished products in production, and new forms of organization within the industry through monopolies – or violation of the monopoly situation (Landström, 2005, p. 40-41). Deeply rooted in the dynamics of the five previous mentioned strategic combinations, Schumpeter claimed that we would find the entrepreneur. According to Schumpeter's theory, successful innovation requires an act of will, not of intellect. It depends, therefore, on leadership, not intelligence, and it should not be confused with invention. He was insistent that innovation and invention require entirely different kinds of aptitudes. Although entrepreneurs may be inventors just as they may be capitalists, they are inventors not by nature of their functions, but by coincidence – and vice versa. Furthermore, Schumpeter emphasised that the entrepreneur has an aptitude for leadership stemming in part from the use of knowledge (Hebert & Link, 2009, p. 69-73).

Entrepreneurship as a mind-set – a tool in education

Based on the text “Green paper – Entrepreneurship in Europe” (EU Commission, 2003, p. 5) entrepreneurship is described as a *mind-set*. This indicates that entrepreneurship is a way of thinking, a formation process in which you have developed your entrepreneurial abilities and aptitude through experience since you were a child. The entrepreneurial mind-set emerges like an inner impetus that strengthens your human abilities and qualities such as your integrity, humility, intuition, dedication, creative forces, passion, innovativeness, flexibility, courage, will to risk, self-confidence and stamina. Gradually, experiences filled with these mixed strengths

provide you with a strong attitude and make the approach and response time to problems or challenges shorter, both in time and action.

Entrepreneurship is also about people, and the choices and the actions they have become a part of. It regards starting, taking over or managing an activity/a project, or involvement in a group's strategic decision-making. Entrepreneurship arises from within the person and not from the business idea. An entrepreneurial mindset is not about what you do, but who you are (Luczkiw, 2007, p. 54). An entrepreneurial mindset emerges through being able to wonder, to reflect on experiences, to think independently, showing receptivity and sensitivity and thus by handling the universal drama of life. The entrepreneurial mindset covers an individual's motivation and capacity, independently or within an organization, by identifying opportunities and pursuing them in order to produce activities giving new experiences, excitements, ideas, added value or economic success.

A hermeneutic approach to entrepreneurship research

The Norwegian philosopher Tore Nordenstam (2005, p. 52) underlines that hermeneutics is the science of understanding. Hermeneutics is about truth – or about both understanding and truth. “When we understand the tradition, we not only understand texts, but acquire knowledge and acknowledge the truth” according to the German philosopher Gadamer (2010, p. 21).

To trace the history of a translation of entrepreneurship as both a concept and a mind-set is a quite complex matter. It is essential that I as researcher learn to know how to build up an understanding of understanding and truth. I have to make what is written about entrepreneurship understandable to me as researcher. A hermeneutic approach to a phenomenon emphasises that there is not one actual truth, but that phenomena can be interpreted in different levels, and that meaning can only be understood in the light of the context of what we study. We understand parts in terms of the whole, and the whole in terms of the parts. I could obtain this understanding by seeking knowledge in the sources that give me a greater insight into, and a better understanding of both entrepreneurship as a concept, and as a mind-set when translated from one context to another. My sources can bring me into a refined understanding of both others and myself.

There is always a risk that I will become a victim of my own horizon of understanding, caused by the fact that everything I understand seems to be understood in the same way, within the same frame of understanding. If that happens, it will probably be said that my understanding is not at all

in motion. On the contrary, it could be said that my understanding is free of dynamic and that I am not vigorously and curiously searching for new insights and further understanding. How can I avoid prejudice governing my understanding of my work and how can I avoid becoming a victim of my blind spots?³

To avoid it I must, according to Gadamer, dare to put myself at risk in the pursuit of this new insight and understanding. I have to dare to be a stranger to myself, let go of my regular patterns of thought, old forms of understanding and prejudice in order to let the text speak to me – and let it affect me as a human being. The prejudice of perfection not only means that a text should express its opinion in a perfect manner, but also that what it says is the perfect truth (Gadamer, 2003, p. 40). Understanding means primarily to understand myself in the cause – and only then to distinguish and understand the other's opinion, as Gadamer writes: “It is in dialogue with the text I can anticipate perfection of understanding” (ibid.). If I want to understand the translation process the conception of entrepreneurship has been put through, I must be prepared to look for new records of understanding. In this process, the hermeneutic circle⁴ will be my central system of analysis, where I, by being in dialogue with the past, can contribute to creating real and genuine understanding by being in motion, and through that contribute to creating a form of mutual adjustment between the whole based on the parts and the parts based on the whole. Furthermore, we need to uphold the dialogue between what we must interpret and our own understanding – or between what we should interpret and the context in which it will be interpreted (Gadamer, 2003, p. 33-34). The anticipation of meaning, with a reference to the whole, becomes explicit understanding when the parts, which can be determined based on the whole, decide the same whole itself (ibid.).

³ “Blind spots” introduced as a phenomenon by Gadamer and the Danish Philosopher Steen Wackerhausen (2008) can, among other things, mean that we are locked inside customary thinking – and do not risk being a stranger to ourselves – in order to find new perspectives of known problems.

⁴ The Hermeneutic Circle – “The circle cannot be a nuisance and must not become something that could not be tolerated either. In the circle we will find well hidden a positive possibility of the most original recognition, which we only can apprehend when the interpretation has understood that the first, the permanent and last job will be to avoid simple opinions to decide purpose (Vorhabe), foresight (Vorsicht) and anticipation (Vorgriff), but to ensure the scientific subject when preparing these, based on the things itself” (Heidegger, quoted in Gadamer, 2003, p. 36).

For me, this means that when I am in a hermeneutic circle motion, I understand by virtue of what I already have understood. I will carry pre-understanding with me, and it constitutes my linguistic capability, my genuine way of being in the world. Furthermore, Gadamer writes that it is important that I as a researcher know that I do not know, in order to be sure that I am open to new perspectives and safeguarding the duty of expanding the unit of implied meaning in concentric circles. The fact that all the parts fall into a whole in each case is a criterion that I have understood correctly. If such a correlation is absent, it means that I have failed to reach a full understanding (Gadamer, 2003, p. 33).

By having this implanted in my intellectual baggage, I start the trip further into the process of understanding and preparing myself to outline the *impact history* of the conception and mind-set of entrepreneurship.

Towards an entrepreneurial society

However, the strongest political go signal for making Entrepreneurship a powerful tool in European education emerged through an exceptionally clear strategy, carved out ready for use for the purpose of creating a time-adapted, broad based, cross-science education system, for people and organisations with a learning approach, as expressed by the British OECD delegate Colin Ball at an OECD conference in Paris in 1989:

In short, people will need to be creative rather than passive, capable of self-initiated action, rather than dependent; they will need to know how to learn rather than expect to be taught; they will need to be enterprising in their outlook, and not think or act like an 'employee' or 'client'. The organisations in which they work, communities in which they live, and societies in which they belong will, in turn, also need to possess all these qualities.

When tracing the concept of entrepreneurship and its contextualisation into the educational system, this Paris meeting has become a milestone. Politicians, bureaucrats, business and industry actors were given a wake-up call about the importance of entrepreneurship as a vital factor in education.

At the same time in Europe, the unemployment rate steadily increased, especially among young people. The competition between the US and Europe was hard and the vast growth in the East affected Europe deeply. The rules and regulations that served Western democratic societies well into the industrial era no longer served us well at that time. An organic

network replaced the machine metaphor. The scientific method, the dominant science in the modern age, was challenged by a new science of complexity as the emerging scientific paradigm. The practice of entrepreneurship held a great deal of promise for navigating in chaos, complexity and disruption. But while the discipline of entrepreneurship reflects the science of complexity, the school and university culture continues to be the repository of scientific method (Luczkiw, 2007, p. 44). The reason for the strong focus on contextualisation of entrepreneurship into education, schools and training environments, was primarily rooted in the knowledge of the new market-oriented economy and increasing globalisation. It became more and more accepted that the future would bring continuous rapid and comprehensive changes in most life areas. Continuous technological inventions and a new world market brought about new international competition. These global features have capital consequences for the labour market, concerning both employment conditions and the organisation of work. We are moving towards a society where entrepreneurship is becoming more significant than ever and we can claim that we are entering a more entrepreneurial society (Spilling, 1998, p. 13).

Entrepreneurship in translation

But why was this sudden translation process started and set in motion, how was it set in motion, by whom and when? What really happened, and what did not happen, when entrepreneurship was introduced as a learning strategy in education throughout Europe?

To be able to understand the translation process of the entrepreneurship concept from the economic to educational context, I will use “Translation Theory”, previously used to translate languages, but which during the last thirty years has more and more become a discipline preoccupied by development and distribution of organisational ideas and concepts.

The theoretical approach in this article is built upon the theories of the Norwegian professor in Political Science, Kjell Arne Røvik, who has designed a theory that is appropriate for the questions I will meet when identifying and describing this translation process. *Translation theory* is a pragmatic approach to how to transfer knowledge, where the main factor is to be preoccupied with the normative and potential implications regarding knowledge transfer as interpretation. It has become a theory tradition with great relevance to the understanding of the translation of ideas and concepts between organisations. The phenomenon translation of organisa-

tional knowledge can in an analytic perspective be divided into two types of processes, namely de-contextualisation and contextualisation.

De-contextualisation refers to bringing something out of a context. This refers to all incidents where organic practices and/or recipes are identified and taken out of a context, for example the concept of entrepreneurship, with the aim of being translated and inserted into one or several other contexts. It is possible to differentiate between two types of de-contextualisation – *detachment* and *packing*. In this connection detachment means, for example, that a concrete successful practice in one particular context is formed with a view to be translated to other contexts. Packing gives a concept a more general form, and by doing that, makes it more transferable to a new context, contributing to a universalization of a context-based idea or concept (Røvik, 2009, p. 22).

Contextualisation can be understood as the demand, receipt, implementation and utilization of popular ideas or concepts. It is described as an unpacking process of concepts regarded as a possible new and added value for organisations preoccupied by innovation. The generating, transfer and receipt of organisational ideas can in a broad perspective be understood as a kind of translation: something is brought forth from a particular context, transferred and applied, transformed to and inducted into one or several other contexts (Røvik, 2009, p. 23). This could, for example, be a description of how the concept of entrepreneurship was transferred from the context of economy to the context of education. By separating between de-contextualisation and contextualisation, we can obtain an analytic conceptualisation of the whole chain of transfer.

International networks

In the last decades the amount of international collaborator networks has increased immensely and could be described as political or scientific regime structures. New fields of practice in international politics and science are today assembling for frequent meetings between representatives of many nations. Several field-restricted cooperative arrangements have been established, often referred to as international regimes (Stokke & Claes, 2001, p. 258-278).

A regime is generally divided into two parts – a substantial part, which includes written goals, basic causal beliefs and description of norms, rights and obligations – and an operational part consisting of folded procedures, embodied practices and artefacts.

One direction in the type of international regimes is called knowledge-based regimes. They occur often as a result of knowledge-oriented approaches in which the players' perceptions of the world are largely formed through international collaboration (Haas, 1989). Such performances may be superior images of how the world is connected, but also more specific normative principles and beliefs about the cause-effect relationship. The Norwegian-Russian Fisheries regime in the Barents Sea, The International Atomic Energy Agency, The Intergovernmental Panel on Climate Change and diverse humanitarian missions, may serve as examples of this type of regime (Stokke & Claes, 2007, p. 258-278; Haas, 1990).

Through the influence of such performances, international regimes create network arenas where players get together to express and create areas of growth for their own interests, creating conditions for a common pattern of behaviour and helping to create the instruments needed to achieve their own objectives.

Within the regime context, the Epistemic Communities are the impetus of international regimes. Through having control of knowledge production, the Epistemic Communities have a high degree of influence on diverse issue areas (Galbreath & McEvoy, 2012).

The OECD can be called an epistemic community. The power of the OECD pervades academia and society and diffuses beyond democratic decision-making through various networks of political decision makers, civil servants and experts. Research done by the Finnish researcher Johanna Kallio cements the view that the OECD's legislative power is limited. Parallel to its narrow legislative influence, the organisation has, however, created other effective forms of "soft laws". OECD peer reviews, recommendations and indicator studies combined with the EU's methods represent "soft laws", which are "rules of conduct" aiming to steer the national level decision-making, higher education agendas and future legislative reforms (Kallio, 2009). Without the influence of OECD experts concerned about entrepreneurship in education and of promoting the entrepreneurial spirit of Europe the regime organisations within the EU would have had great difficulties to translate Entrepreneurship as a vital issue in education as well as in the labour market context in Europe, in Norway and the other Scandinavian countries.

The rise of entrepreneurship in the educational context

It is reasonable to look upon the de-contextualisation of the entrepreneurship concept from the economic context and the contextualisation of it into Norwegian education, at least partly as a result of processes between professionals in actor networks that have been given birth to within an epistemic community. Furthermore, it is reasonable to understand that much of what can be experienced as pre-political preparations are displayed in these kinds of sub-political meeting spaces and at a later stage will end up as formal political strategies. Confronted by the knowledge of the entrepreneur as a risk-taking, creative, entrepreneurial and innovative human figure who also possesses entrepreneurship skills and abilities, it is opportune to think that some of the most influential people throughout Europe started to reflect about how it could be possible to stimulate and nurture entrepreneurial humans in schools and education systems. It is also likely that it became one of the subjects of the national and international regime groups and epistemic communities travelling around meeting each other, talking, reflecting and discussing different approaches to entrepreneurship. Over some time new ideas developed on how to promote entrepreneurship, how to reach the entrepreneurial talents, and how to educate them, so that their entrepreneurial abilities were strengthened. The discussions continued and these new ideas started to create precedence. From the first substantial speech about the subject by Colin Ball in Paris in 1989, it took about 14 years before the EU commission gave the entrepreneurship concept its formal political birth, shown in a written strategic document.

In January 2003 the EU Commission published the “Green paper Entrepreneurship in Europe” describing the new strategies for job creation, increased competitiveness, to unlock personal potential, and to increase societal interest in entrepreneurship as a first step towards creating an entrepreneurial culture in Europe.

The year after the Green paper, the Norwegian government came up with the strategy document including a government vision: “See the opportunities and make them work”, saying:

Entrepreneurship in the education system shall renew teaching and training and create quality and multiplicity in order to foster creativity and innovation.⁵

⁵ The Strategic Plan of Entrepreneurship in Education 2004-2008. The Norwegian Govern-

Two scenarios

Having outlined an impact history of entrepreneurship, I chose to turn the time clock back 10 years. Then the contextualisation of the concept began. To show how the process can be described, it is tempting to dramatize it by creating a *sliding door* effect. What if we had the opportunity to follow two different development scenarios?

The first one is as close to the truth as my experience can bring me. This I will call *The translation of young enterprise into the educational context in Norway*. The second one is perhaps an example of how the process should have been accomplished. This I will call *The translation of the thought of entrepreneurship as a method of human action in Norway*.

Scenario I – Entrepreneurship as a method

The models that characterize today's entrepreneurship education in schools are models adapted and developed within the Confederation of Norwegian Enterprise. However, we will find that many of them have been adapted to the Norwegian education system from being artefacts for promoting entrepreneurship in the US through the organization Junior Achievement/Young Enterprise (JA/YE) (Ungt Entreprenørskap Norge – UE Norge, 2012). This organisation, which has now gone global, is a very efficient and coordinated network. Being a global network, it was likely to play a role in the translation processes of the entrepreneurship concept to different countries and languages. The major factor in the JA/YE concept is the idea of mini-enterprises within schools. The mini-enterprise is a training method giving pupils or students an opportunity to develop and design an idea: to plan, organise, start up, run, and finally, to shut down a company. Usually this process lasts one school year.

In Norway the contextualisation of JA/YE started in NHO system during 1996 and for the next couple of years up till the millennium Young Enterprise Norway appeared and grew fast into being an organisation represented in all counties throughout Norway.

In 2010 there were 150,000 pupils/students, 14,000 teachers and 13,000 mentors participating in some kind of entrepreneurship related program

ment (2004:1) Kunnskapsdepartementet, Nærings- og handelsdepartementet og Kommunal- og regionaldepartementet (2009-2014).

through Young Enterprise Norway. The organisation has about 20 well-prepared and professionally developed programs for the whole education system, from primary school up to higher and further education, both for teachers and pupils. All the evaluations reveal that there is a high degree of satisfaction among the users, politicians and private actors involved (Ovesen, Gjertsen & Rønning, 2011).

A paradox is, however, that entrepreneurship in education in Norway, all in all is brought into Norwegian schools from outside actors. The education authorities on the governmental level have modelled the strategic directives for the activity, and are apparently quite confident with Young Entrepreneurship's standardized learning concepts.

Young Enterprise Norway today is so interwoven with the context of education that no competitors are challenging them. Two thirds of the annual budget of Young Enterprise Norway is covered by the Norwegian Government and the counties and one third is covered by private sponsors. The organisation has now reached a budget close to 90 million NOK and has 40 very engaged and enthusiastic employees throughout the country assisting schools in a very professional way.

Scenario II – Entrepreneurship as a mind-set

The teaching professions were probably taken by surprise when the wave of entrepreneurship was washing over the education system just before they were about to enter the new millennium. There had neither been prepared nor initiated any real reflection or discourse about the subject in their organisations.

What would have happened if the government ten years ago had told the teaching organisations and school owners as follows: "We know that the key to success in schools is to have confidence in teachers and school managers. We want to invite you to be responsible for creating an entrepreneurial school, with entrepreneurial learning strategies and methods and furthermore to outline a strategy for creating an entrepreneurial culture within education and training for the best of our children and youth."

Inspired by an invitation to be a part of a bottom up strategy process, I would assume that the participating actors would initiate a good discourse about entrepreneurship in education and training in Norway. Through a good second order reflection they could be inspired to create all the good approaches possible, and make the implementation of entrepreneurship in school a very successful process for all the interested actors. A superior goal

would be to create a clear vision, mission and passion, some values and dynamic goals, and some educational strategies for active and interactive participation.

Through a pedagogical process the expected aim should be making pupils fit to meet the challenges of the future, by keeping focus on applicable skills and innovative problem-solving attitudes built into education. This would be called entrepreneurial mind-set training. Through entrepreneurial mind-set training young people could be trained in working on their own life project, continuously developing it. A process like this, if it were monitored well as an action oriented project built on a passionate belief of success, could succeed in making the school a more time adapted learning system. These adaptations should, however, rest on some insights and principles. First of all, they would have to take into consideration their target group. Their macro insight would tell that our young generation is communicating in global virtual communities, in which they are accessible 24 hours a day. Furthermore, they are travelling a lot, both electronically and physically. Their arenas of experience, training and discovery are becoming more and more global; they are becoming technologically expansive and trendsetters with the highest technological education in history. Their electronic playing field is borderless via mobile phones, the Internet and social media.

What kind of school system could fit these individuals and groups? I suggest: A school where astonishment and curiosity are focused, where questions are asked, answers found and mediated, and evaluations made. A school where all the members have responsibility for their own learning (participatory) or a school where the pupils and students work together solving real life challenges (problem-based). A learning environment where the pupils/students could have learning programs linked to own experiences (experience-based), or a school where the involved pupils are preoccupied by working with many subjects at the same time (project-based), and finally a school where all the work done could be for the benefit of themselves, their environment and local community, and even globally (result-oriented). The most exciting would be a flexible combination of all these school concepts.

Discussion

If I am challenged to conclude and to summarize the final result of this process, there would probably be a majority of those who meant that scenario I is the winner. Entrepreneurship as a strategy in education at present could to some extent be called a product of liberal market forces. Young enterprise Norway has, based on a level-headed view of the current status, achieved almost a monopoly situation as supplier of training concepts to all educational levels in Norway. All the public strategy plans are nurturing and encouraging co-operation between business and industry, and the labour market perspective. Teacher organisations also have a school–working life perspective, where the skills fit for profit making activities get the focus. This is looked upon as a great achievement for the necessary strengthening of collaboration between business and trade, industry and the education system and schools.

However, there is a critical question to pose: is it plausible to claim in this connection, that instrumentalism has won over humanism or that the capitalisation of society has been so strong that it is not possible to make any major changes? Have teachers managed to break the code of pedagogical entrepreneurship and taken up action-oriented learning processes where multiple arena learning is the rule, not the exception – or will the four walls of the classroom still be the issue? (Eide, 2012) This is up to the future to reveal.

Furthermore, is it likely to claim that we, instead of initiating critical reflection and discourse about future oriented work forms adapted to the spirit of our times have seen outlines of a technocratic methodological system. The Norwegian professor in pedagogy Gunn Imsen asks:

For how long will teachers and educators be forced into roles as administrators of instrumental learning concepts and control regimes, developed by actors from outside schools, based on market economy principles? Key persons in this process were neither school leaders nor teachers. The “outsiders” seem to have taken over the power of definition of what is and should be pedagogical work (Imsen, 2009).

The Action plan for Entrepreneurship in Education in Norway includes the vision and the mission, the beliefs and aims teachers and educators should follow in the coming years up to 2014. However, the critical factor in future education seems to be whether we can further motivate teachers in schools by giving them responsibility, confidence and freedom for future

teaching and didactic planning. History shows that it is through mutual confidence and freedom to create educative teaching environments that teachers and school managers can contribute to enterprise, growth, innovation and progress. To succeed in creating broad-based entrepreneurial teaching as well as training forms a suggestion would be to reinstate teachers and educators as driving forces in the development of the context of a future entrepreneurial learning culture, readily in close cooperation with interested and enthusiastic outside actors.

Conclusions

My aim for this article was to put the entrepreneurship concept in a broad historical sociological and organisation theoretical context, seeking to follow the concept's translation from the economic to the educational context, its entry into the European and Norwegian political context, and to highlight the concept's contextualisation into the Norwegian education system. The concept has influenced Norwegian education for more or less 20 years in various ways. I have illustrated how the concept has gained its status today, and which processes it has been part of in order to obtain this status.

For the sake of future generations it seems to be necessary to come up with a joint effort to renew the school system so it will be possible to stimulate young people to look for opportunities – and make them work. By doing this they could be prepared to face the interdependent culture that is taking shape among them, rapidly emerging as a new global paradigm, a paradigm that is transforming the culture of any one nation state. Whether we look at environmental, social or economic issues, a global paradigm has begun to emerge, sharing values that are more similar between nation states than those found within. This emerging external environment has its own complex and divergent structures, system and behaviours (Luczkiw, 2007, p. 45). Admitting this, there is a great opportunity to develop a practical action-oriented educational system that could give young people the golden key to their future as both self-creating individuals and as inspirational creative workers.

Since I have chosen a partly normative and advocating approach to this vital subject, I will risk indicating that a sound strategic entrepreneurial bottom-up culture building process has not yet been seriously introduced to Norwegian teachers and schools. At best, one can see traces of culture fragments, but they mostly belong to the neo-liberal understanding of the

concept. Norwegian schools are full of professional and qualified teachers; they are long overdue for innovation, and students are impatiently waiting for new entrepreneurial work forms, and the change agents in schools are eager to become a part of a critical reflection (Imsen, 2009).

In the midst of a wilderness of questions and answers within this field of practice, the most interesting approach to the above mentioned issues is provided by the two American professors, Sarasvathy and Venkatamaran (2010, p. 114) asking:

What if we have been thinking about entrepreneurship the wrong way?
What if we temporarily suspend our thinking of it, as a sub-discipline of economics or management, or a subset of courses taught in business schools?

They fear education may be in danger of falling into a category error. One way out of this error could be to reformulate entrepreneurship as a method of human action, comparable to social forces such as democracy and the scientific method, namely a powerful way of tackling large and abiding problems at the heart of advancing our species.

References

- Eide, O. S. (2012). Aksjonsforskning og pedagogisk entreprenørskap. In J. Sjøvold (Ed.), *Entreprenørskap i utdanningen* (pp. 35-47). Trondheim: Tapir Akademisk Forlag.
- Elliot, J. E. (1983). Introduction to the Transaction edition. In J.A. Schumpeter (Ed.), *The Theory of economic development* (pp. vii-lix). London: Transaction Publishers.
- EU Commission (2003). *Green Paper Entrepreneurship in Europe*. Brussels: Commission of the European Communities.
- Gadamer, H. G. (2003). *Forståelsens filosofi. Utvalgte hermeneutiske skrifter*. Oslo: Cappelen Akademiske forlag.
- Gadamer, H. G. (2010). *Sannhet og metode*. Oslo: Pax Forlag.
- Galbreath, D. J. & McEvoy, J. (2012). European Organizations and Minority Rights in Europe. *Security Dialogue*, 43(3), 267-284.
- Haas, P. M. (1989). Do regimes matter? Epistemic communities and Mediterranean pollution control. *International Organization*, 43(3), 377-403.
- Haas, P. M. (1990). Obtaining International Environmental Protection through Epistemic Consensus. *Millennium: Journal of International Studies*, December 1990, 19(3), 347-363.

- Hebert, R. F. & Link, A. N. (2009). *A History of Entrepreneurship*. New York: Routledge Studies in History and Economics.
- Imsen, G. (2009). Målstyring i klasserommet. Klassekampen 2009. *Reprint of articles, chronicles and editorial letters. Klassekampen in the period 14th of February – 26th of August 2009*, pp. 70-71.
- Kallo, J. (2009). *OECD Education Policy. A Comparative and Historical Study Focusing on the Thematic Reviews of Tertiary Education*. Research in Educational Sciences, No. 45, Finnish Educational Research Association, Helsinki.
- Kunnskapsdepartementet, Nærings- og handelsdepartementet og Kommunal- og regionaldepartementet (2009–2014). *Regjeringens strategiplan for entreprenørskap i opplæringen – “Se mulighetene – og gjør noe med dem”*. Oslo: Kunnskapsdepartementet.
- Landström, H. (2005). *Entreprenørskapets rötter*. Lund: Studentlitteratur.
- Luczkiw, E. (2007). The end of entrepreneurship: a holistic paradigm for teaching and learning about, for and through enterprise. *Industry and Higher Education*, 2(1), 43-57.
- Nordenstam, T. (2005). *Eksemplets Makt. Dialoger 2005*. Retrieved from www.dialoger.se
- OECD conference “Education and economy in a changing society”, Paris 1989.
- Ovesen, S., Gjertsen, A., & Rønning, W. (2011). *Evaluering av KRD's og NHD's tilskudd til Ungt Entreprenørskap*. NF Rapport (09).
- Røvik, K. A. (2009). *Trender og Translasjoner. Ideer som former det 21 århundrets organisasjon*. Oslo: Universitetsforlaget.
- Sarasvathy, S. & Venkatamaraman, S. (2010). Entrepreneurship as Method: Open Question for an Entrepreneurial Future. *Entrepreneurship Theory and Practice*, Special Issue: Future of Entrepreneurship, 35(1), 113-135.
- Solstad, K. J. (2000). *Entreprenørskap, noko for oss*. Bodø: Nordlandsforskning.
- Spilling, O. R. (red.) (1998). *Entreprenørskap på norsk*. Bergen: Fagbokforlaget.
- Stokke, O. S. & Claes, H. D. (2001). Internasjonale regimer. In J. Hovi & R. Malnes (Eds.), *Normer og makt: Innføring i internasjonal politikk* (pp. 271-299). Oslo: Abstrakt forlag.
- Ungt Entreprenørskap Norge – UE Norge (2012). Young Enterprise – YE (2011). Retrieved November 15, 2012, from http://www.youngenterprise.org/company/about_ye/
- Wackerhausen, S. (2008). Erfaringsrum, handlingsbåren kundskab og refleksion. *RUML/Refleksion i praksis*, 1, 3-21.

This article has been subject to blind review.

School Song Repertoire as a Means of Building National Identity

Camilla Cederholm, Åbo Akademi University, Vaasa, Finland

School songs have commonly been used as a means for education on different topics, regardless of culture and time. This study explores the content of 12 songs in the traditional Finland-Swedish school song repertoire from the 19th century until today. The main aim of this article is to analyze the lyrical content of these songs using a hermeneutical approach, with special focus on how the canonization of a song repertoire has been used as a means of building national identity and fellowship within a language cultural group. The structure of the study is a threefold hermeneutical perspective: the sociocultural, the music pedagogical, and the musico-analytical perspective. However, this article will be limited to lyrical content analysis. Preliminary results suggest that songs that survive despite changes in society generally share some common characteristics: the lyrics contain nature descriptions and patriotic expressions.

Key words: School Song repertoire, Finland Swedish, Lyrical Content Analysis, National Identity

Introduction

Oh, lovely tune, our precious heritage,
may you sound loud and free,
from shore to shore through centuries...

J.F. Hagfors in Song of Our Mother Tongue (free translation)

The above lines exemplify the main content of the Finland-Swedish song *Modersmålets sång*. It is an example of how song lyrics express fellowship, national identity and belonging, by relating to language, traditions and nature. Songs that survive from one generation to another retain their value over time, despite changes in society. What kinds of values are considered so important, that a song consistently claims its position within a canonized song tradition? National song repertoires obviously tell the history of a nation and its traditions, and so do the songs of Finland-Swedish origin, which are in focus in this article. I choose to study the canonization of songs as a socio-cultural process, which, in cooperation with school curricula, have contributed to the molding of a song repertoire, thus mediating national identity and fellowship through songs. In the empirical analysis, I look for expressions of national and cultural identity through the song lyrics. Some results of the musical analysis will also be incorporated in order to better understand the type of songs studied here. For a further examination of the musical elements in the studied songs, I refer to my thesis in progress.

In this study, my aim is to explore the lyrical content of twelve common songs in three song lists of Finland-Swedish origin. Focus will be on finding lyrical characteristics which can be interpreted as traits of national and cultural identity. The research question is: In which ways do the lyrics of the 12 songs in these song lists indicate cultural and/or national identity? In order to answer that question, the school song repertoire needs to be positioned in a broader context, that is, the socio-cultural arena from which it has developed. Furthermore, a music pedagogical perspective in the form of general aims and values in the school music curricula will be incorporated into the background for analyzing the lyrical content.

The song repertoire in this study is analysed and interpreted through three perspectives, which are also used as a framework for the whole study: the socio-cultural perspective, the music pedagogical perspective and the musico-analytical perspective. The three perspectives are visualized in Figure 1. The first two perspectives form the theoretical background for the study, while the third, the musico-analytical perspective, consists of the primary empirical material, 60 songs. However, due to lack of space, in this article the empirical analysis will be limited to the lyrics of twelve songs in the three song lists.

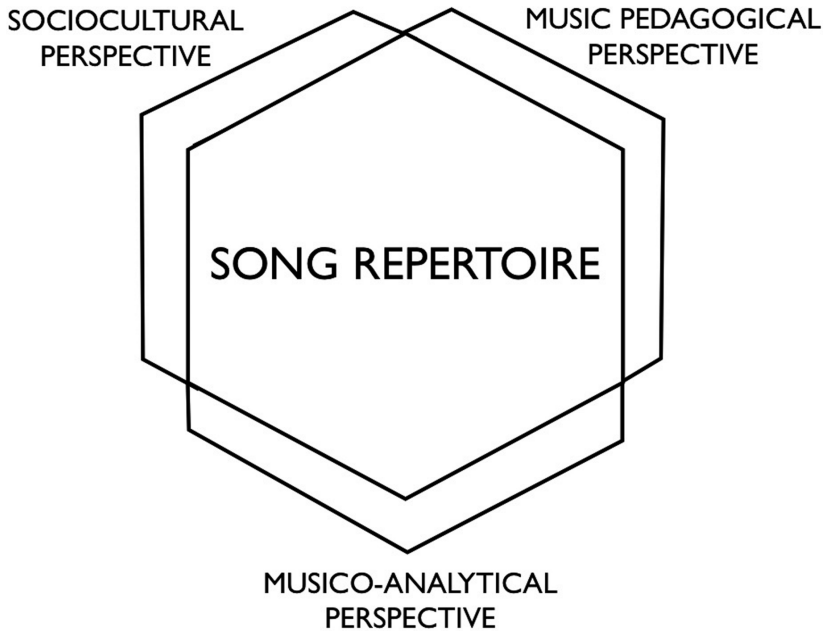


Figure 1. Three perspectives applied on the song repertoire.

Based on this threefold perspective, I perform a hermeneutical interpretation in order to expose certain traits that can be considered building blocks for national and cultural identity, and how they appear within the Finland-Swedish song tradition.

Research motives and previous research

In my thesis in progress I have extracted four general research motives to carry out research on the canonization of songs: lack of research in the field, lack of description of the characteristics and development of the Finland-Swedish song canon, the gradual changes of song repertoire in general music education, and finally, my own personal interest in the field. In this article emphasis is put on the second motive: the need for a description of common characteristics within a national song repertoire from a Finland-Swedish point of view. Are the characteristics of the twelve songs similar to previous research, or are there significant differences that can be traced to the minority status of the population studied?

There are only a few educational studies about the canonization of (folk) songs: In Sweden Netterstad (1982) discusses song lyrics in school song books as literature, while Flodin (1998) has done research on song lists from Swedish teachers' colleges in the 1940s. Reimers (1983) studies both lyrics, music and the social context in nursery songs composed by Alice Tegnér. Norwegian school song traditions are discussed by, for instance, Berg (2006) and Lund (2010). Berg uses an electronic survey in order to explore today's knowledge of traditional Norwegian song repertoire, while Lund studies song book repertoires, comparing them with the school curricula over time. Lund's approach has much in common with my thesis project, as I also have studied a lot of song books, although from a different starting point: the three previously mentioned song lists. In Finland, I have found one thesis about the Finnish school song tradition (Pajamo, 1976), and only a few Master's theses about school song repertoire: for instance, Reinikainen (2007a), Ranta (1998) and Ekuri (2008). The general conclusions made in these theses are that patriotic, religious and nature elements are common characters of school song repertoires.

No clear description or validation of which songs belong to the Finland-Swedish song canon seems to exist. By examining school song books and other song books, it is possible to find out which songs truly belong to the canon and its transformation over the years due to new repertoire and societal development. Initial work examining song books in the Finland-Swedish arena has been done by, for instance, Hansén (1985) and Häggman (1996). However, these songs no longer play an obvious part in the general music education due to a) change of priorities in school curricula, b) the gradual change from national to international focus, and c) change of music ideals, and the ever-increasing music production. My personal interest in the subject originates from my professional work as a music teacher, where I have noticed a decreasing knowledge of traditional Finland-Swedish songs among my students. The songs that used to be commonly known in our culture no longer play an obvious part of the song repertoire in schools. This is, of course, a natural development, but still the question "why" and "what happened" arises. What kind of songs survive through time, and what kind of messages do these songs mediate?

Theoretical background – a threefold perspective

My research approach is hermeneutical, and it contains both an analysis of the song lyrics and a music analysis. The method used is a descriptive content analysis (Dey, 1993; Forsberg & Wengström, 2003; Ödman, 2007). In addition to the hermeneutical approach, where philosophical statements by Gadamer (1976/2004) contribute to my ontology, my position draws on features from the social constructivist field of research, according to which reality and common sense' is a social construction, built up through an ongoing interaction between former knowledge and new experience (Alvesson & Sköldberg, 2008). Furthermore, Alexander's (2011) discussion of cultural sociology supports my general point of view; songs are cultural artefacts formed by several complex socio-cultural background factors.

The empirical arena for my study is Finland-Swedish song culture, the songs and their impact on society from the end of the 19th century until today. The Finland-Swedish population today is a linguistic minority of a little less than 300 000 citizens, with their own cultural traditions, such as native songs in Swedish. This kind of song repertoire is my main interest in this study. The Finnish national school curricula include compulsory education in music. Previously, this school subject was called "singing", which implies the focus of musical education. However, in 1970, the name was changed to "music", thus allowing a broader educational perspective within the school music arena (Grundskolans läroplan, henceafter GrL, 1970).

Socio-cultural perspective and key concepts

Within the socio-cultural perspective, several arenas of impact on the development of a song canon can be distinguished since the late 1800s. Hansén (1988, 1991) describes the reasons for development of a national identity from the linguistic point of view: the overall nationalistic forces in Europe during the national romantic era, the development of an independent nation after World War I, and the gradual changes considering linguistic relationships in the 1900s. Accordingly, concerning song tradition, there are several coinciding sociopolitical events which have contributed to the forming of a song canon. I have found four consistent themes within the socio-cultural perspective since the late 1800s: nation, identity, language, and since the 1970s, internationalism. These four themes can also be found within the music curricula, expressed directly or indirectly. Within

these themes, there are key concepts concerning cultural heritage, tradition, canonization, identity and nationalism. The definitions of these key concepts will be discussed in this section.

Concerning cultural heritage, Halvorsen (2005) underlines the importance of knowing your own cultural heritage. The transmission of a certain song tradition presumes knowledge about it, and without this awareness, you cannot possibly decide whether and how to preserve it or not. The Finnish national school curricula have long emphasized the importance of knowing your country's traditions and culture as a means of understanding other, different cultures (see, for instance, the national school curricula (Grunderna för grundskolans läroplan, 1994, 1985; Grunderna för läroplanen för den grundläggande utbildningen, 2004)). Björkholm's (2011) thesis on the subject: "Intangible Cultural Heritage as Concept and Process" states that the characteristics of a cultural heritage consist of a considered general value, in combination with a strong symbolic value. Björkholm divides the process of the artefact becoming a cultural heritage in three stages: selection, attribution of value, and symbolic status. Beckman (2005) divides the cultural heritage into two parts, a) an unconsciously transmitted cultural heritage within a natural process, and b) an institutionalized cultural heritage, which consists of a selection, chosen through societal, ideological, or political interests, then attributed with value, and thus transmitted as valuable artefacts. In this study, the molding, or canonization of a certain song repertoire, has undergone the latter version of legitimization. Based on these statements, I define a cultural heritage considering song repertoire as songs that possess some or all of these characteristics, that is, they have been legitimized, published in song books, repeatedly sung in schools and at concerts, and have through that process received a symbolic status and value.

Published song books have become important mediators for the song canon. This process have a lot in common with the process of canonization, as defined by Shreffler (2011, p. 5), discussing the traditional classical music masterworks: ".../ first, the maintenance of the existing canon of older masterworks, second, the process by which newer works are added to it, and third, the formation of parallel canons within different repertoires." The existing canon is, according to Shreffler, continuously re-evaluated nowadays, and also, there are parallel canons of different types, such as music style or origin. The meaning of the word canon itself is somewhat crucial, while a canonical song tradition is formed through influences from various non-musical sources, such as societal interests, cultural and historical impacts and economic benefits, a phenomenon that is often

called 'the hidden curriculum' (For further explanation of different types of curricula, see Wilson (2005)). Thus, songs considered to belong to a canon are in fact chosen for many different, non-musical reasons, a fact that is commonly ignored by the admirers of the canonical songs. In this article, I speak of the song canon as the state of the art in the 20th century, consisting of songs that, through expressed ideals in the school curricula and school doctrines (see Kivinen, 1988), were considered important, and thus, for decades, were taught to pupils in folk schools in the Swedish-speaking regions in Finland. These ideological and political questions, as well as the origins of the traditional songs, are also discussed by Häggman (2005).

Canonization is an on-going process that slowly changes with time. Similarly, the Finland-Swedish song canon has undergone revisions since the mid-1940s, when the first song list in the study was defined. The existing 'masterworks' in this study are likely to consist of songs by famous poets and composers of Finnish origin, while newer works might occur in the latter song lists, especially in the third one, as it allows the repertoire to also contain songs not originally from the school song repertoire. In brief, a song canon is here defined as a combination of individual artefacts into an empirical body of material, which can be studied using the three song lists through individual analysis and comparison. The canonization of songs can be described as the process of adding and subtracting songs within a certain type of song repertoire with symbolic value. Thus, another question arises: which songs actually belong to the canon-in-use?

Research on and statements about tradition have been made by a lot of researchers and philosophers (Bourdieu, 1990, 1991; Bourdieu & Passeron, 1977; Dahlhaus & Austin, 1982; Ehrenforth, 1986; Halvorsen, 2004, 2005; Shils, 1981). Alvesson and Sköldbberg (2008) define the social order and legitimization of traditions according to Berger and Luckmann's (1979) statement, where the institutionalization (construction of permanent acting strategies) is a central characteristic of tradition. That is, through habitualization, the process where habits are repeated and consolidated in similar situations, and through constant revision, tradition is formed and communicated from one generation to another. Shils (1981) shares Berger and Luckmann's point of view, adding to the previous statement by emphasizing the importance of repetition as a means of validation of traditions. In my opinion, song repertoires which retain their value, despite rapid changes in society, are formed through this kind of process: repetition, legitimization and transmission. Hence, the school curricula play an important role by imprinting certain values, which the song lyrics in a recommended school song repertoire also support.

Cultural identity and the concept of nationalism

The question of identity soon arises when discussing a matter like song canonization. Halvorsen (2004, p. 34) states that the experience of roots and context is important for the development of a personal and cultural identity. One of the main aims for putting together a common repertoire in the late 19th century was to unite the otherwise rather heterogeneous group of Swedish-speaking people in Finland (Åström, Lönnqvist & Lindqvist, 2001). According to Liedman (1994), at this period of time, the process of building a collective national identity was considered very important. The public folk school was one of the main means of building such a national identification, and by using school textbooks and core songs, the consciousness of belonging to a specific nation or culture was established (see also the statements of Tingsten (1969) on the use of school textbooks for certain ideological purposes).

The common opinion of national identity in those days, and also the roots for the national romantic era, was based on Herder's statements on *Volksgeist*, a concept according to which different peoples possessed some kind of natural 'national spirit' or character (Curtis, 2008). Although this concept is now more obsolete, it had substantial impact on the nationalistic ideals. Consequently, the folk song tradition was one of the most genuine ways of discovering the spirit of national identity' also known as *Volksgeist*. This was the starting point for the collection of folk songs, carried out by Otto Andersson and the Brage Association in the early 1900s (Nyqvist, 2007). The concept of national identity in its turn laid the foundation for the nationalistic movement, which, according to Lampinen (2000), increased throughout 19th century Europe, especially in such countries where a linguistic minority was in control of the society. Lampinen considers the school to be in a very important position for uniting people, but points out that the celebration of the home country also includes opposite effects, that is, by setting up boundaries against minorities and cultures within the nation. Furthermore, he underlines the differences between nationalism and patriotism, the latter being an inclusive appreciation of cultural and national differences, while nationalistic forces oppose other cultures.

Curtis (2008) emphasizes the idea of a *Volksgeist* being a social construction, an imaginary invention by nationalist intellectuals. Accordingly, the construction of national identities follow a similar concept, of which Geisler (Andersson & Geisler, 2007; Geisler, 2003) regards national anthems as a good example of implying patriotic values, with the possibility to include or exclude people from other cultures. In Finland, Østern (2004) has

described various perceptions of cultural identity among Finland-Swedish adults, while Lönnqvist (2001a, 2001b) presents a thorough description of the development of a Finland-Swedish concept of national identity within a nation, i.e. “being Finnish in Swedish”. Considering the above discussion, I define the origin of patriotic songs as a result of the general nationalistic movements during the 19th century, a tribute to the home country, without any expressed intentions of excluding others. However, such underlying meanings can obviously also be extracted from the song lyrics, but using manifest content analysis only, searching for such traits is not my intention.

Building a Finland-Swedish song tradition

The main part of the Finland-Swedish song tradition originates from the national-romantic epoch in the late 1800s, one of the main reasons being the awakening of a Finland-Swedish national identity (Lönnqvist, 2001b). Poems by Swedish-speaking authors, such as Zacharias Topelius and Johan Ludvig Runeberg, were originally published in school textbooks. Some of these poems were set tunes to, and due to the widely spread textbooks they gradually became well-known examples of the Finland-Swedish song repertoire (von Numers, 1999). During the 1800s, composers such as Fredrik Pacius and Karl Collan wrote many songs, a few of which have become an important part of the Finland-Swedish song culture (von Numers, 1999). Later on, in the early 1900s, composers such as Jean Sibelius and Oskar Merikanto also participated in the construction of a song repertoire that nowadays could be called the Finland-Swedish song canon.

Another part of this song tradition was formed by a vast number of folk songs, which music researchers like Otto Andersson started to collect in the beginning of the 20th century, mainly through the Brage Association, founded in 1906, whose main interest was to collect and preserve different cultural artefacts of Finland-Swedish origin. The melodies that Otto Andersson collected, performed by violin players in the Finland-Swedish region, were later simplified, before Andersson gave the new’ folk melodies to his poet friends, consciously developing a Finland-Swedish song repertoire. (Nyqvist, 2007, p. 139-143)

Thus, the Brage Association, in a rather short time, constructed a general song repertoire from the old melodies. The lyrical topics often were about nature and the beautiful countryside, and these songs were highly appreciated among the new bourgeois social class in the Finnish cities. As Häggman (2000) states, these songs were even more traditional than the

original folk songs. Another form of transformation was the revitalizing of old folk songs: some of the original lyrics were discarded as inappropriate, so the lyrics had to be changed in order to suit the more cultivated bourgeois people (Nyqvist, 2007; Stenius, 1991). Many of these songs are also known within the song tradition in Sweden, which clearly shows that Finland-Swedish composers and lyricists have made their contribution also to the Scandinavian song canon (for a further description of the Swedish song tradition, see Flodin (1998) or Netterstad (1982).

Music pedagogical perspective

The music pedagogical perspective focuses on the educational impact on school song repertoires, i.e. the content of the school curricula considering fields of importance for the development of a song canon. Formed out of sociopolitical decisions, school curricula stress certain themes, which are exposed in song lyrics.

In Finland, the national folk school educational system was a result of the aims for educating the Finnish people. School songs, or core songs, played an important role in this education, as songs as well as poems. The general cultural and historical values were presented in the most famous early textbook from Finland, *Boken om vårt land* (Topelius, 1875). After the Independence Declaration in 1917, Finland started building a school system which would grant the right to an education for every citizen, regardless of home location, urban or rural (Kivinen, 1988).

Since 1866, when the first steps towards a public folk school were taken, the national school curricula have gone through many revisions. The main focus has changed quite a lot over time, from the emphasis on religious and patriotic repertoire in the early curricula, over to a gradual emphasis on international matters in the curricula dating from the late 1900s. The hymns and sacred songs are no more mentioned in the music curricula after 1970. A special notification is made in the curriculum from 1952, according to which popular music should not be sung or performed at school due to its simple character and unsuitable lyrical and musical content (National Finnish School Curriculum, 1952). The earliest curriculum (Lönbeck, 1901) stressed the importance of lyrics rather than the music itself, while the first half of the 20th century emphasized the virtues of a common repertoire as well as the enjoyment of singing and musical performance. In 1985, the school song books had become international to such an extent that the need for reviving the traditional songs seemed to be justified. Accordingly, within

the frames of the national curriculum, the second song list was incorporated into the school music curriculum (*Grunderna för grundskolans läroplan*, henceafter GrL, 1985).

Content analysis – the musico-analytical perspective

The musico-analytical perspective in this article closely relates to the empirical material, that is, the three song lists and the analysis of song lyrics. In this section, I describe the methods used for the selection of the songs, and the overall process considering the lyrical content analysis: the main song categories, the node groups and some of the descriptors.

The three song lists

The repertoire in focus is chosen through three song lists, with a total of 60 different songs. The forces behind the development of such song lists can be traced to sociopolitical interests during the late 1800s, when the national awakening took place in Europe (Curtis, 2008). As a result of this national awakening, many countries formed their national song repertoires during this period, exposing them through national school curricula, as the recommended repertoire for citizens within a nation (Castrén, 1945; Emanuelson, 1990; Flodin, 1998; Lund, 2010; Pajamo, 1976). The use of songs has long been considered important for educational purposes, such as transmission of religious, aesthetic and patriotic values (Knudsen, 2007; Pajamo, 1976). The first two song lists evolve from such educational motives exposed in school curricula. In Finland, several waves of national mobilisation can be recognized, such as the general national romantic era in the late 1800s, and the period after World War I, when Finland became independent (Hansén, 1991). Furthermore, the division in linguistic emphasis performed in the 1920s resulted in the Finland-Swedish population identifying itself as a linguistic and cultural minority: a nation within the nation (Lönnqvist, 2001a, 2001b).

The first two song lists consist of recommended school song repertoires expressed through curricula, while the third one comprises a top-thirty-list, a survey result completed by the Finland-Swedish music journal *Resonans* (FSSMF, 2000). The first song list was published in the school song book *Visbok för skolan* (Castrén, 1945), and consists of 20 songs that every Swedish-speaking Finn should know, and pass on to future generations. This is a normative statement, referring to the decision by the Finland-Swe-

dish School Association in the mid-1940s (ibid. 1945). These songs have been considered important cultural artefacts in the 1940s, and have a lot in common with the Swedish tradition of core songs, as described by Flodin (1998) and Netterstad (1982), two of the researchers who have studied the Swedish song tradition, in a similar way to mine.

The second song list consists of a recommended school song repertoire of 41 songs. It was published in the national school curriculum in 1985 (GrL, 1985). One reason for this action towards a common school song repertoire, and the need for emphasis on native Finland-Swedish songs, can be traced to the school song book series *Vi gör musik* (published by Engström & Cederlöf in the 1970s), where the number of traditional Finland-Swedish songs clearly decreased. In fact, complaints about the lack of traditional songs in this series resulted in a separate song book with only Finland-Swedish songs: *En visa vill jag sjunga* (Cederlöf, 1978). Furthermore, Berg (1986) published a school song book based on this given repertoire: *Vår gemensamma musikskatt*, aiming to meet the needs of the new music curriculum from 1985.

The third song list consists of 30 favorite songs plus 11 “self-evident”, patriotic songs, that is, a total of 41 songs. This survey was initiated by the Finland-Swedish Song and Music Association, thereafter called FSSMF (2000), and completed by their music journal *Resonans*. The number of respondents was 93, and this song list is used in order to explore which songs have kept their position in the Finland-Swedish song canon over time.

The distribution of songs in these song lists is quite diversified. Only twelve songs appear on all three lists. I define these as some kind of core songs within the Finland-Swedish tradition, hence choosing to analyze these lyrics further in this article. Naturally, we find the Finnish national anthem *Vårt land* among these twelve, but beside that, there are folk songs, patriotic songs, lyric-romantic songs, and one hymn. As they also occur frequently in the studied song books, they indicate the character of the core of the Finland-Swedish song canon. The song titles, their authors, the main song category, and amount of song books published, are shown in the table below.

Table 1. Twelve common songs in the three song lists.

| Song title (Main song category) | Lyricist | Composer | Published in number of song books (n=29) |
|----------------------------------|----------------|---------------|--|
| 1. Vårt land (A) | J. L. Runeberg | F. Pacius | 21 |
| 2. En sommardag i Kangasala (B) | Z. Topelius | G. Linsén | 15 |
| 3. Modersmålets sång (B) | J. F. Hagfors | J.F. Hagfors | 15 |
| 4. Nylänningarnas marsch (B) | Th. Lindh | H. Borenius | 15 |
| 5. Ålänningens sång (B) | J. Grandell | J.F. Hagfors | 11 |
| 6. Giv mig ej glans (C) | Z. Topelius | J. Sibelius | 14 |
| 7. Plocka vill jag skogsviol (D) | A. Slotte | Trad. | 15 |
| 8. Slumrande toner (D) | A. Slotte | Trad. | 13 |
| 9. Sommarmarsch (D) | E.V. Knape | Trad. | 13 |
| 10. Båkländets vackra Maja (E) | A. Mörne | H. Hagbom | 11 |
| 11. Svanen (E) | J. L. Runeberg | F.A. Ehrström | 16 |
| 12. Vid en källa (E) | J. L. Runeberg | F.A. Ehrström | 19 |

Methods for categorization

The methods used for analysing the material were a combination of two: firstly, the Finnish national school curricula from the 19th century until today were analysed, exploring the musical content and statements about recommended characteristics of song lyrics. In addition to this, 29 Finland-Swedish song books were studied in order to explore the song frequencies and how the published song books divided the different types of songs into groups. Such categories were folk songs, Christmas songs, patriotic songs, hymns, and lyric-romantic songs, mostly about nature. After this pre-work on song categories, a close reading of the song lyrics demanded some additions to the previous categories. These findings resulted in eight main song categories, the twelve studied songs belonging to categories A-E. Categories A and B are both patriotic in content. Table 2 shows the distribution of the 12 songs in each category.

Table 2. Distribution of songs.

| Main song categories | Number of songs (n=12) |
|---|------------------------|
| A Scandinavian national anthems (patriotic) | 1 |
| B Patriotic songs | 4 |
| C Hymns (Sacred songs) | 1 |
| D Folk songs | 3 |
| E Lyric-romantic songs | 3 |

Node groups and descriptors

However, this division into main categories appeared to be insufficient, as the songs were likely to contain elements from several different categories. Therefore, a preliminary content analysis of the twelve songs was made using the computer programme N'Vivo. This resulted in several nodes with new sub-nodes, or descriptors, to which also new additions were made continually during the close, denotative reading of all the lyrics. Since I was not interested in the amount of a certain descriptor, but only the possible occurrences of each descriptor in a song, N'Vivo was not used further in the analysing process. In all, the songs were analysed through 82 descriptors, divided into nine different node groups, which are shown in Table 3. These node groups were constructed using the former song categories, although specified for the purpose of the wanted detail analysis.

Table 3. Node groups and number of descriptors in the detailed content analysis.

| Node groups I–IX | | Number of descriptors |
|------------------|--|-----------------------|
| I | Patriotism | 11 |
| II | Religion | 2 |
| III | Music style and origin | 9 |
| IV | Human relations, emotional expressions | 17 |
| V | Time and season | 16 |
| VI | Target group (person, profession) | 6 |
| VII | Nature descriptions | 13 |
| VIII | People (as subject or object) | 7 |
| IX | Singing and music (in general) | 1 |
| | Descriptors in total | 82 |

Lyrical content analysis results

In this section, I describe a few of the content analysis results, with primary focus on the song lyrics of the twelve studied songs. It is impossible to reveal all the results, so the discussion will be limited to the most frequent lyrical characters. As earlier mentioned, a node tree was constructed while performing a close examination of the song lyrics, applying descriptors and defining node groups at the same time. Table 4 displays the number of songs within each node group and the number of descriptor occurrences connected to them.

Table 4. Results of the content analysis of the song lyrics. Number of songs within each node group and occurrences of descriptors.

| | Node group I–IX | Number of songs within the node (n=12) | Number of descriptor occurrences |
|------|--|--|----------------------------------|
| I | Patriotism | 9 | 30 |
| II | Religion | 7 | 7 |
| III | Music style and origin | 5 | 5 |
| IV | Human relations, emotional expressions | 12 | 50 |
| V | Time and season | 10 | 23 |
| VI | Target group (person, profession) | 5 | 5 |
| VII | Nature descriptions | 12 | 70 |
| VIII | People (as subject or object) | 11 | 19 |
| IX | Singing and music (in general) | 7 | 7 |

Within these nine node groups, the most common lyrical content concerned nature descriptions. Statements about the Finnish nature were assigned to this node group: expressions referring to landscape and/or a special place, hills, forests, seas and lakes, herbs, flowers and trees, but also phrases describing heaven, earth and weather conditions were considered to belong in this node group (see Figure 2 below). A sub-category within this group was referral to water elements, such as rain, waves, ice, snow and shorelines. All twelve songs contain this kind of vocabulary, the number of descriptors being as many as 70.

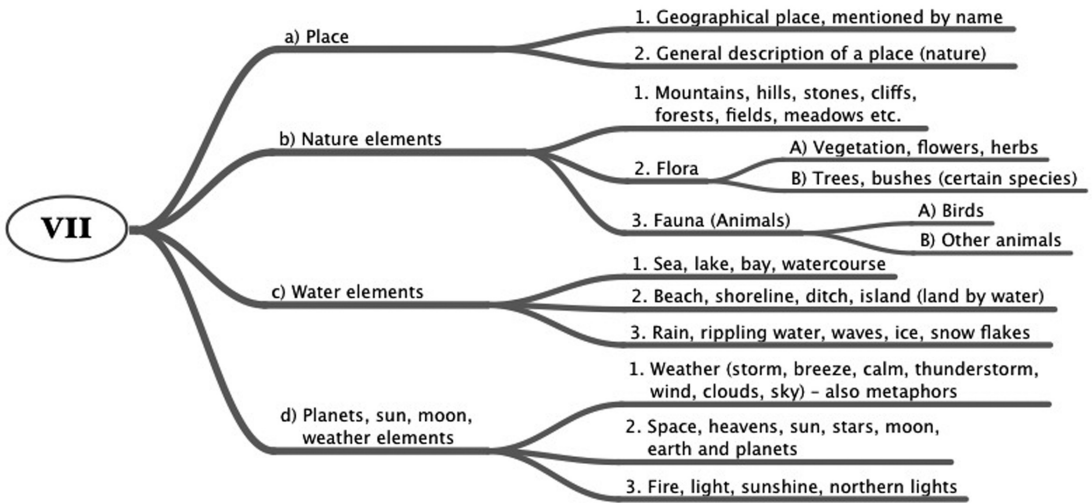


Figure 2. Node group of nature descriptions.

Another group of significant characters in the song repertoire is human relationships and emotional expressions. All twelve songs show signs of emotion, which is nothing extraordinary, since in general, most songs do refer to emotions of some kind. The main node is divided into three subgroups: a) love and affection, b) expressions of emotion, and c) memories, thoughts, dreams and reflections, with a total of 50 occurrences considering the descriptors.

Node group I includes patriotic traits, the most expressive signs of national identity. Figure 3 shows the layout of the descriptors within this node. Three subgroups were formed within the patriotic node group: a) home country, general patriotic and historical traits, such as fight for freedom and loyalty to the country b) homestead, region and provinces c) heritage, traditions, habits and 'valuable symbols', such as the flag, and the mother tongue.



Figure 3. Descriptors within the node patriotism.

Nine of the songs contain patriotic terminology. The occurrence of patriotic expressions is rather high, with 30 occurrences. The most frequent content within this node group concerns homestead and regional referrals (Ib2 – 6 songs), followed by proclamations of something valuable (Ic1 – 5 songs). Within node group Ia, historical traits and patriotic love are most frequent with 4 songs.

Most of the songs contain some kind of personal subject and/or object. Within this node group, there are subgroups such as persons with actual names, along with more neutral expressions like “you” and “I”. A special subgroup within this node group is the statement of unity within a group, with expressions such as we’ and our’, but not referring to a relationship between man and woman. The Finnish national anthem *Vårt land* is a suitable example of this type of a song, where the indication of fellowship is frequently expressed by use of the term our land’ and our home country’. Only one song, *Svanen*, does not contain such expressions of personal pronomina. This song uses birds as subjects instead of people.

The space within this article does not allow me to go further into the details of the musical analysis, but one specific trait deserves to be mentioned: all twelve songs are in a major key. Compared to the general description of Finnish music as being “sad and in a minor key” (Kukkonen, 1997; Kukkonen, 2008), that does not seem to be the case with the Finland-Swedish core songs. This finding is supported by the work of Kukkonen (1997), who claims the Finland-Swedish songs to be happier than the Finnish ones. Similar results are described by Cornelis, Lesaffre, Moelants

and Leman (2010), who show that the further west we go in Finland, the brighter and happier the tonality of the songs are. Furthermore, the national school curricula from 1927 (*Lantfolkskolans läroplan, LaFL, 1927*) prescribes suitable songs and melodies for children to be “in major key, sung in a brisk tempo”. In conclusion, the Finland-Swedish song repertoire used in schools shows signs of being positive, both regarding tonality and lyrical content.

Discussion

The aim of this study was to explore what kind of traits a school song repertoire might contain, which can be considered building blocks for a national and/or cultural identity. The focus has been on lyrical themes occurring frequently in 12 common songs, and how they might contribute to a sense of fellowship and identity. Four distinct song categories can be found: five patriotic songs, three lyric-romantic songs, three folk songs, and one hymn.

What kind of common traits then appear in the Finland-Swedish song repertoire? The most frequent traits are nature descriptions, which to a large degree consist of elements typical for the Finnish landscape: the flora and fauna. That is, the birds are often swans and warblers, the flowers are, for instance, violets or heather, and the trees are birch, spruce and fir. The studied songs refer to water, lakes and shores, and the stories are about people, their relationships, thoughts and emotional lives.

There are implications that patriotic values have been considered important, since nine of the songs contain such traits. The Finland-Swedish population being a minority, the importance of mother tongue has been expressed, directly or indirectly, through the song lyrics, thus establishing a solid ground for the sense of belonging and fellowship. These results coincide with previous research on the subject (Flodin, 1998; Netterstad, 1982; Pajamo, 1976; Ranta, 1998). The school song repertoire studied here expresses signs of national as well as cultural identity, by means of using patriotic words, referring to local nature and the importance of a cultural heritage. Hence, the method used in the article might be of interest also to other researchers within the same field. Even though the categories and descriptors used here seem to be coherent, another selection of songs might have given a different result. However, the preliminary results of the lyrical analysis of all 60 songs in my thesis (Cederholm, in progress) coincide with the results presented here.

References

- Alexander, J. C. (2011). *Kulturell sociologi. Program, teori och praktik*. Göteborg: Daidalos.
- Alvesson, M. & Sköldberg, K. (2008). *Tolkning och reflektion. Vetenskapsfilosofi och kvalitativ metod* (2. ed.). Lund: Studentlitteratur.
- Andersson, G. & Geisler, U. (2007). *Myt och propaganda – musiken i nazismens tjänst i Sverige och Tyskland* (Vol. 5). Lund: Lunds Universitet.
- Beckman, L. (2005). *Grundbok i idéanalys: Det kritiska studiet av politiska texter och idéer*. Stockholm: Santérus Förlag.
- Berg, B. (1986). *Vår gemensamma musikkatt*. Vasa: Svenska Läromedel.
- Berg, Ø. (2006). *Den norske sangskatten?* Retrieved November 14, 2012, from <http://www.norskmusikkproduksjon.no/>
- Berger, P. L. & Luckmann, T. (1979). *Kunskapssociologi. Hur individen uppfattar och formar sin sociala verklighet*. Stockholm: Wahlström & Widstrand.
- Björkholm, J. (2011). *Immateriellt kulturarv som begrepp och process. Folkloristiska perspektiv på kulturarv i Finlands svenskbygder med folkmusik som exempel*. (Doctoral Dissertation, Åbo Akademi University). Åbo: Åbo Akademis förlag.
- Bourdieu, P. (1990). Artistic Taste and Cultural Capital. In J. C. Alexander & S. Seidman (Eds.), *Culture and Society. Contemporary Debates* (pp. 205–215). Cambridge: Cambridge University Press.
- Bourdieu, P. (1991). *Kultur och kritik*. Göteborg: Daidalos.
- Bourdieu, P. & Passeron, J.-C. (1977). *Reproduction in Education, Society and Culture*. London: Sage Publications.
- Castrén, M. (1945). *Visbok för skolan* (1. ed.). Vasa.
- Cederlöf, E. (Ed.) (1978). *En visa vill jag sjunga: 192 finländska visor och sånger*. Helsingfors: Fazer.
- Cornelis, O., Lesaffre, M., Moelants, D., & Leman, M. (2010). *Access to ethnic music: Advances and perspectives in content-based music information retrieval*. Signal Processing, 90, 1008–1031.
- Curtis, B. (2008). *Music Makes the Nation. Nationalist Composers and Nation Building in Nineteenth-Century Europe*. Amherst: Cambria Press.
- Dahlhaus, C. & Austin, W. W. (1982). *Esthetics of Music*. Retrieved November 14, 2012, from <http://books.google.fi/books?id=Js8Wc6q2pqEC&pg>
- Dey, I. (1993). *Qualitative Data Analysis. A User-friendly Guide for Social Scientists*. London and New York: Routledge.
- Ehrenforth, K. H. (1986). Identity and alienation. Cultural problems of our world and the duties of music education. In J. Dobbs (Ed.), *ISME Yearbook XIII. New Perspectives In Music – New Tasks For Music Education* (Vol. XIII, pp. 31–35). Innsbruck: International Society for Music Education (ISME).

- Ekuri, S. (2008). *Laulutunnista musiikintuntiin. Koulumusiikin sukupolvet 1900-luvun kansa- ja peruskoulussa. Pro gradu-tutkielma 2008. Musiikkikasvatus. Jyväskylän yliopisto*. Retrieved October 26, 2012, from https://jyx.jyu.fi/dspace/bits-tream/handle/123456789/19428/URN_NBN_fi_jyu-200901021000.pdf
- Emanuelson, B. (1990). *Musik i skolan. Musikämnets didaktik i historisk belysning*. Lund: Studentlitteratur.
- Engström, B. O. (1976). *Vi gör musik i årskurs 3: lärobok i musik för grundskolans lågstadium: Elevens bok* (4. ed.). Stockholm.
- Engström, B. O. (1980). *Vi gör musik i årskurs 4-6: lärobok för grundskolans mellan-stadium*. Stockholm: Ehrlingförlagen.
- Engström, B. O. & Cederlöf, E. (1978). *Vi gör musik i årskurs 1 och 2* (3. ed.). Stockholm: Ehrlingförlagen.
- Engström, B. O. & Cederlöf, E. (1981). *Vi gör musik: lärobok i musik för grundskolans mellanstadium* (Tolfted ed.). Stockholm: Ehrlingförlagen.
- Engström, B. O. & Cederlöf, E. (1982). *Vi gör musik: visbok för högstadiet och gymnasiet*. Stockholm: Ehrlingförlagen.
- Flodin, A. M. (1998). *Sångskatten som socialt minne: en pedagogisk studie av en samling skolsånger*. (Doctoral Dissertation.) Univ., Stockholm: HLS Förlag.
- National Finnish School Curriculum (1952) Folkskolans Läroplanskommittés betänkande. Helsingfors.
- Forsberg, C. & Wengström, Y. (2003). *Att göra systematiska litteraturstudier*. Stockholm: Natur och Kultur.
- FSSMF. (2000). *Den finlandssvenska sångskatten. 30 i topp-listan. Enkätmaterial*. FSSMF:s arkiv, Vasa.
- Gadamer, H.-G. (1976/2004). *Philosophical Hermeneutics* (D. E. Linge, Trans.). Berkeley: University of California Press.
- Geisler, U. (2003). „... was an Musik des Nordens nur nordisch maskiert ist“. Konstruktion und Rezeption „nordischer Musik“ im deutschsprachigen Musikdiskurs. In B. Almgren, F.-M. Kirsch (Eds.), *Sprache und Politik im skandinavischen und deutschen Kontext 1933–1945*: Aalborg Universitetsforlag. Retrieved October 26, 2012, from <http://www.lu.se/o.o.i.s?id=12588&postid=536835>.
- Grunderna för grundskolans läroplan. (1985). Helsingfors: Statens tryckericentral.
- Grunderna för grundskolans läroplan 1994. (1994). Helsingfors: Utbildningsstyrelsen.
- Grunderna för läroplanen för den grundläggande utbildningen 2004. (2004). Helsingfors: Utbildningsstyrelsen.
- Grundskolans läroplanskommittés betänkande II. Läroplan för läroämnena. (1970). Helsingfors.
- Halvorsen, E. M. (2004). *Kultur og individ: kulturpedagogiske perspektiv på kulturforståelse, kulturprosesser og identitet*. Oslo: Universitetsforlaget.

- Halvorsen, E. M. (2005). *Verdier og skole. Om verdiformidling og verdikonstruksjon i grunnskolen*. Bergen: Fagbokforlaget.
- Hansén, S.-E. (1985). *Läroböcker och identitet. Det finlandssvenska inslaget i våra läromedel*. Helsingfors: Svenska Finlands folkting.
- Hansén, S.-E. (1988). *Folkets språk i folkets skola: studier i modersmålsämnets mål- och innehållsfrågor i den svenska folkskolan i Finland 1866-1927*. (Doctoral Dissertation, Åbo Akademi University). Åbo: Åbo Akademis förlag
- Hansén, S.-E. (1991). *Tradition och reform: urval och konstruktion av modersmålsämnets läroplanstexter från 20-tal till 80-tal*. Åbo: Åbo Akademis förlag.
- Häggman, A.-M. (1996). *Sångerna som gav finlandssvensk identitet Folkmusik i förändring. Folk och musik 1996*. Vasa: Publikationer utgivna av Finlands svenska folkmusikinstitut 22.
- Häggman, A.-M. (2000). *Sångskatt i förändring*. Resonans 2, 8–9.
- Häggman, A.-M. (2005). *Symboler i den finlandssvenska musikens värld SFV-kalendern 2005* (pp. 34–43). Helsingfors: Svenska Folkskolans vänner.
- Kivinen, O. (1988). *Koulutuksen järjestelmäkehitys. Peruskoulutus ja valtiollinen kouludoktriini Suomessa 1800- ja 1900-luvuilla*. Turku: Turun Yliopisto.
- Knudsen, J. S. (2007). *Music education in an age of globalisation. Educação para a Cidadania Europeia com as Artes* (pp. 105-116). Retrieved October 26, 2012, from http://home.hio.no/~jansk/Music_education2007.htm
- Kukkonen, P. (1997). *Ilon ja surun sointu. Folkloresta poploreen*. Helsinki: Yliopistopaino. Helsinki University Press.
- Kukkonen, R. (2008). *Aavan meren täällä puolen: Arkkityyppiset piirteet ja amerikkalaisvaikutteet suosituimmassa suomalaisissa molli-iskelmissä*. Abstract. (Doctoral Dissertation). Helsingin yliopisto, Helsinki. Retrieved October 26, 2012, from <http://urn.fi/URN:ISBN:978-952-92-3403-5>
- Lampinen, O. (2000). *Suomen koulutusjärjestelmän kehitys* (2. ed.). Helsinki: Gaudeamus.
- Lantfolkskolans läroplan. (1927). Helsingfors.
- Liedman, S.-E. (1994). *Det nationella som idé*. In H. Karlsson (Ed.), *Hemländsk hundraårig sång”. 1800-talets musik och det nationella* (pp. 46–50). Stockholm: Kungliga Musikaliska Akademien.
- Lund, R. E. (2010). *“I sangen møtes vi på felles grunn” – om sang og sangbøker i norsk skole*. Acta Didactica Norge. Retrieved October 26, 2012, from <http://adno.no/index.php/adno/article/view/132>
- Lönbeck, G. F. (1901). *Folkskolans handbok. En samling författningar rörande Finlands folkskoleväsende jämte tre register* (2. ed.).

- Lönnqvist, B. (2001a). Myten om den finlandssvenska familjen. In A.-M. Åström, B. Lönnqvist & Y. Lindqvist (Eds.), *Gränsfolkets barn. Finlandssvensk marginalitet och självhävdelse i kulturanalytiskt perspektiv* (pp. 26–36). Helsingfors: Svenska litteratursällskapet i Finland.
- Lönnqvist, B. (2001b). Retoriken i den etniska mobiliseringen. In A.-M. Åström, B. Lönnqvist & Y. Lindqvist (Eds.), *Gränsfolkets barn. Finlandssvensk marginalitet och självhävdelse i kulturanalytiskt perspektiv* (pp. 16–25). Helsingfors: Svenska litteratursällskapet i Finland.
- Netterstad, M. (1982). *Så sjöng barnen förr: textmaterialet i de svenska skolsångböckerna 1842–1972*. Stockholm: Svenskt visarkiv. Raben & Sjögren.
- von Numers, K. (1999). Det sjungande Finland. In J. Wrede (Ed.), *Finlands svenska litteraturhistoria. Första delen: åren 1400–1900*. Uppslagsdel (pp. 337–338). Helsingfors: Svenska litteratursällskapet i Finland.
- Nyqvist, N. (2007). *Från bondson till folkmusikikon: Otto Andersson och formandet av "finlandssvensk folkmusik"*. (Doctoral Dissertation, Åbo Akademi University). Åbo: Åbo Akademi förlag.
- Pajamo, R. (1976). *Suomen koulujen laulunopetus 1843–1881*. (Doctoral Dissertation). Suomen musiikkiteieteellinen seura, Helsinki.
- Ranta, L. (1998). *Så sjunger finlandssvenska barn: en innehållsanalytisk studie av 1900-talets läroböcker i musik*. Pro gradu. Pedagogiska fakulteten. Vasa.
- Reimers, L. (1983). *Alice Tegnér's barnvisor*. (Doctoral Dissertation). Univ. Bromma, Göteborg.
- Reinikainen, C. (2007a). *Sångrepertoaren i den finlandssvenska grundskolans årskurs 1–6 – Ett lärarperspektiv*. Pro gradu. Åbo Akademi. Pedagogiska fakulteten. Vasa.
- Shils, E. (1981). *Tradition*. Retrieved November 14, 2012, from <http://books.google.fi/books?id=L-zr1Ovc5ggC&pg>
- Shreffler, A. C. (2011). Musical Canonization and Decanonization in the Twentieth Century. In K. Pietschmann und M. Wald-Fuhrmann (Eds.), *Der Kanon der Musik: Theorie und Geschichte. Ein Handbuch. München: edition text+ kritik*. Retrieved October 26, 2012, from http://www.academia.edu/241625/Musical_Canonization_and_Decanonization_in_the_Twentieth_Century
- Stenius, H. (1991). Massrörelser och folklorism. In M. Lindholm (Ed.), *Musik. Sång. Fest 1891–1991. De finlandssvenska sångfesterna som kulturföreteelse och impuls-givare* (pp. 16–23). Jakobstad: Finlands Svenska Sång- och Musikförbund.
- Tingsten, H. (1969). *Gud och Fosterlandet* (2. ed.). Stockholm: Norstedt.
- Topelius, Z. (1875). *Boken om vårt land. Läsebok för de lägsta läroverken i Finland. Andra kursen*. Helsingfors: Edlund.
- Wilson, L. O. (2005). *Curriculum Index*. Retrieved October, 26, 2012, from <http://www.uwsp.edu/education/lwilson/curric/curtyp.htm>

- Ödman, P.-J. (2007). *Tolkning, förståelse, vetande. Hermeneutik i teori och praktik*. (2. ed.). Stockholm: Norstedts Akademiska Förlag.
- Østern, A.-L. (2004). 'My language tree': young Finland-Swedish adults tell us about their linguistic and cultural identities. *Journal of Curriculum Studies*, Taylor & Francis (pp. 657–672). Retrieved October 26, 2012, from <http://www.tandf.co.uk/journals> doi:10.1080/0022027041000229378
- Åström, A.-M., Lönnqvist, B., & Lindqvist, Y. (2001). *Gränsfolkets barn. Finlands-svensk marginalitet och självhävdelse i kulturanalytiskt perspektiv*. Helsingfors: Svenska litteratursällskapet i Finland.

Part 4

This article has been subject to blind review.

The Conference Poster as a Multimodal Hybrid Form of Knowledge Exchange

Anna-Lena Østern, Norwegian University of Science and Technology

Alex Strømme, Norwegian University of Science and Technology

To communicate research in an appealing and condensed form is a challenge for researchers. Because of the emerging new literacies the audiences for research communication seem to accept and enjoy multimodal research presentations, and the audiences even expect the presentation to be artistic as well as scientific at the same time. In the poster design process this double challenge becomes quite evident. Epistemologically, the production of art links to the scientific investigation through the explorative process of meaning making. As one innovative aspect of the Norwegian graduate school for teacher education, NAFOL, its doctoral students were invited to create and present a poster about their research in progress, and to participate in a poster mingle session at the NAFOL conference held in May 2012. There were 44 poster presentations exhibited at the conference, which means that about 66% of the doctoral students responded to the challenge. These posters and a survey of the doctoral students about the poster production and presentation serve as empirical material analysed in the study presented in the article. The aim of the study is to contribute to knowledge about the challenges for the researcher in this hybrid form of knowledge exchange. The students found the poster form production very demanding, but also very rewarding. In particular, they were overwhelmed by the beauty of the posters exhibited by their fellow students. The vivid conversation about research during the posters mingle session was also highly appreciated.

Key words: Poster as Multimodal Hybrid Genre, Poster Communication Dramaturgy, Poster Innovation

Background, aim and context

The poster presentation is often thought of as a beginner's game at conferences, and it certainly is a good task for fresh researchers in order to get focus and conclusions clarified (MacIntosh-Murray, 2007). Our pre-understanding is that a poster presentation is not a simplified version of a project description. The poster genre is demanding, because of its hybridity, consisting of written text, visual design, and oral presentation as well as dialogue with the audience. To produce a high quality poster might be quite challenging. The technical production of the poster is a skill, and can be learned. Most people find the hardest part to transform their message and present it visually and orally in the restricted format of a poster session. If the poster does not catch the interest of fellow researchers it is a very lonely place for the presenter to be in the midst of vivid conversations around other poster presentations. When it comes to the presentation the researcher must be very alert, and prepared to answer any question that might arise from the poster (MacIntosh-Murray, 2007).

The aim of this study is to problematize aspects of research communication through poster presentations. The poster is a cultural expression, and there are some rather indistinct principles guiding this presentation form. The research question posed in this study is: What are the characteristics of research communication through posters? The problematizing concerns the following questions: How might the culture around poster presentations become vitalized by stressing their hybridity as a resource? What are the aspects that doctoral students pay attention to in their design process and in poster communication in a conference setting?

New literacies in research communication

There is an ongoing process of change within research communication all the time. It might not be so visible when looking at the strict formats of scientific journals, which are important for researchers, and the rigid formats of calls for papers to conferences. The changes which are noticeable are, for instance, connected to a variety of research positions within mixed methods, and different forms of bricolage presentations as well as Deleuzian rhizomatic analyses. Also efforts to present art-based research are challenging the existing formats for research presentation within education. There is also an increasing number of journals including new literacies. In Norway, for instance, a journal for art and research *InFormation*

was launched in 2012 with presentation forms which include hyperlinks to video and other visual documentation. Some playful occasions are launched where researchers are asked to perform their research results embodied as dance, or there is a “Researchers’ night”¹ arranged with multimodal presentations of ongoing research. The specific challenge for the graduate school NAFOL² is connected to the dimensions of practice and theory, and the doctoral students are explicitly challenged to communicate research in different ways during their doctoral training. It is, as with genre in general, necessary to know the basic rules of the genre, but as important to develop the genre in order not to be caught in frozen positions with no dynamic energy left.

Poster as a hybrid genre

New literacies are described as multimodal (Jewitt, 2009; Kress, 2010). The new literacies demand complex reading skills, or skills to decode the assembly of signs in multimodal communication. The new literacies are mostly connected to the digital world, but new literacies also are visible in research communication. A basic principle for different modes is that each mode has affordances, which make that mode especially well-suited for a certain communication. Each communication actually consists of a composition of different modal signs. The poster with its presentation includes several signs, which the audience must be able to “read” and interpret. It might be called a hybrid with its components of written text, layout, images and oral presentation. The new literacies demand from the researcher the skill of communicating, simultaneously approaching the audience with a cluster of signs, and clusters of meaning making stemming from the talk, the images and the written texts. This communication has been compared to presenting at a market place or a fair. The presenter must attract potential “customers”, finding ways to be special, different and interesting. The presenter can benefit also from perception psychology, neuroscience and rhetoric, especially the actio part. The actio part is the performance of a speech, and in this performance the notions of logos, ethos and pathos can inform the presenter. There must be a sense of logic in the presentation. The presenter must get the confidence of the audience. (Leith, 2012).

Jane E. Miller (2007) has written about “Preparing and Presenting Effective Research Posters” with much of the same focus as Elizabeth

¹ http://ec.europa.eu/research/researchersnight/index_en.htm

² <http://www.nafol.net>

Halliday (2012). In a study from 1996, Cynthia Russel, David Gregory and Marie Gates (1996) focused on the presentation of qualitative research and poster presentations: content, text, materials, component arrangement, and visuals. They also point at the importance of connecting to the potential audience. The views of the poster presenters are in focus in a study by Anu MacIntosh-Murray (2007). In a case study the poster presentations of doctoral students are examined as a research-process genre. In the article genre knowledge required is mapped: poster form, creation processes, presentation practices, and underlying values. For further investigation the complexity issue is mentioned, because a poster must fulfil multiple roles. The hybrid form is casually mentioned, and the complexity is addressed with a special focus on the challenges from digital media use. From this short presentation of research done on poster presentation as research communication, we now turn to the context of the present study.

When flip flopping between the different genres in use, there is a certain risk that the presenter is crossing borders, and forming a new hybrid genre while elaborating the poster presentation. The risk is that the presenter does not communicate well in the genres in use, and thus loses the interest of the potential audience. The crossing of borders is also an innovative space for vitalizing the poster presentation genre, because the empty space the presenter has to cross over in the flip flopping between written, spoken and visual genre signs is the empty space of transduction with its potential for meaning expansion. Gunther Kress (2010) calls the transformation from one modality to another transduction. In a poster presentation the condensed form contains transductions – for instance, from written words to visual signs, and from written words to spoken words.

Basic poster communication dramaturgy

In order to design a poster the researcher must combine the role of the researcher with the role of the artist. In theatre dramaturgy (cf. Evans, 2006) the basic question is: What do you want to convey to the audience? What do you have to say? The dramaturge must be quite clear here, because all other decisions are connected to the answer to this initial question. This is the artistic part of the poster presentation, but it is also the core of a scientific presentation: What is the research problem? To focus the problem in order to attract interest for your project is a prerequisite for a good poster. This focus must be visualized in fonts, use of space and

other modal signs. In dramaturgy the hook is the way the play attracts the audience. The hook in a poster is often visual, or some text written in big enough fonts, and with a question or word that attracts the potential audience.

In dramaturgical thinking the target group analysis is essential; that is why the communication must be very clear about what the audience needs to know in order to grasp the research project presented: Who is the receiver of the poster and its presentation? A skilled poster presenter thinks like a dramaturge: thinks of how to use the space given, how to maintain the audience's interest throughout the poster; in short, how to be aware of the audience as receivers of the text. There must be nerve and drive which keeps up curiosity and engagement in the audience. The content (text and graphics) is not necessarily presented in a linear sequence, like in a paper presentation, and the visual centre of gravity might be anywhere on the poster. The skill to take the position of the other is valuable in the process of designing the poster. To borrow one metaphor from artistic work: less is more. It is necessary to keep up a clear line in the presentation which gives it nerve and drive. The presenter's narrative can be accompanied by hand-outs for the audience wanting to get to know more. Form, aesthetics and content are intertwined in producing the meaning of the poster. The dramaturgical thinking and the new literacies both might vitalize the culture around poster presentations by stressing the hybridity as a resource.

The presenter faces an additional challenge if the poster session is arranged as a competition. In addition to the factors mentioned above, the poster must stand out from the rest of the posters in ways that often cannot be predicted. A jury will assess the content objectively, according to given criteria. However, the "wow-factor" is harder to define, and thus is more up to the jurors' subjective preferences.

The context of poster presentation at a NAFOL conference

The quest for innovation in a national graduate school like NAFOL has been mentioned earlier (Østern & Smith, chapter 1 in this anthology). One task that was an answer to this quest was the construction of a poster task. All doctoral students in the graduate school were invited to contribute with a poster presentation of their research project to a NAFOL conference held in May 2012. The task was given in January 2012, and the

students at that time participated in a workshop of 1-2 hours about poster making. They also received a tutorial text with detailed information about how to design a poster (Strømme, 2012). The deadline for submission was 2 months later. The administrative advisers in the graduate school did the proofreading of the English, organized the printing and the lamination of the poster in large format A0. The administrative staff also organized the setting up of the poster exhibition. The poster mingle session was 45 minutes of the post conference seminar. In the mingle session three poster presenters (with posters beside each other) had to present their posters using 10-15 minutes on each presentation. Other participants could choose to join one of the mingle groups. The poster design was subject to playful competition, and three of the best designed posters won an award after the posters mingle session (cf. <http://www.nafol.net/index.php?page=posterkonkurranse>). The jury comprised the professor who introduced the poster-making session in the workshop in January, one professor of teacher education, and one doctoral student with competence as an artist. The criteria for judging the quality of the poster were: “visual attractiveness, substance content balanced between text and graphic means and more formal requirements of use of sources and graphics”. The jury concluded that all the 44 posters had some of these qualities. They were different. Some of the students had chosen strong visual effects, some had a very attractive title, some had elaborated the text, and some had elaborated visual figures and images:

The most important aspect is to attract readers. You choose something that you want to study more closely, and thus learn something about the topic. Some of the posters have too much text, but even if the texts are of good substance, they are best suited for publication in an article. Others have a visual appearance that excludes them from being first choice for approach. In the final heat we had a few posters left. None of them are perfect; they all have their strengths and weaknesses which we have weighed against each other, and here we have the three posters which we will award.

The aspects that doctoral students pay attention to in their design process and in poster communication in a conference setting

In this section of the article the focus is on the posters and the doctoral students' experiences. The collection of 44 posters can be grouped according to the categories focus on appealing title, focus on visual elements, focus on text, and mixed focus (Table 1).

Table 1. Posters grouped according to focus (N= 44).

| | |
|--------------------------|----|
| Focus on appealing title | 3 |
| Focus on visual elements | 8 |
| Focus on text | 22 |
| Mixed focus | 11 |

The three posters which were awarded were grouped into the three categories with a clear focus on either title, visual elements or text.

The survey distributed to the students shortly after the conference contained Likert scale sentences to agree or disagree upon regarding the poster production process. The survey also contained three open questions. The survey was digital and the answers anonymous. Of the students, 37 responded to the survey. Out of these, 33 students had prepared a poster. There were 11 presenters of posters who did not respond to the survey.

To more than 80% of the doctoral students, this was their first poster presentation at a conference. 50% of the students did not consider the task technically challenging. Over 80% of the students found it difficult to manage the limited space of a poster, however 87% thought that they managed to foreground the essence of their project. Graphical elements were of little importance in order to convey their message (8%), while 81 % considered design important. 60% answered that they tried to make the poster spectacular in order to attract the audience's interest. The competition was of little importance for 55%, and it did not influence the design of the poster. Still, 37% had hoped to win the competition, and 58% understood the decision of the jury, but 11% disagreed with the jury's decision. 75% participated in the poster mingle session and enjoyed it, but 10% did not consider this mingle session rewarding. The open questions were answered through free texts, and we will illustrate and deepen understanding of the frequencies given in the descriptive statistics through identification of themes emerging from the answers.

The most demanding aspect in the poster design process

The question regarding what was the most demanding aspect in producing a poster received 32 answers, which can be grouped into three themes:

(1) It was demanding to sharpen the focus

Example quote: *The most demanding thing was to sharpen the focus, in order to fit into the poster format.*

(2) It was demanding to use visual effects in research communication.

Example quote: *I am not trained to use visual effects in my communication.*

(3) It was demanding to write little text, and in English.

The three themes will be further elaborated in the answers to what lessons that were learnt during the poster process.

The lessons learnt from poster production and presentation

The question *What did you learn most through producing and presenting the poster?* received 33 answers. The themes identified in the answers concern on the one hand (A) the design process, and on the other hand (B) the presentation situation and the learning from watching the other students' presentations, such as to observe elegant use of multimodality, and to present without a written manuscript. One theme that emerged was the experienced shortcomings of the student and the wish to develop proficiency in poster production and presentation.

A) The design process

Most of the comments are about the challenge to be focused, and the deep learning of that aspect. Another theme is the challenge of the multimodal design.

Example quote: *To train to be specific and focused in my communication. It was a very rich learning experience to try to present the project in a visual form, which I have never done before. I think that it is very good that the graduate school gives us the possibility to rehearse different kinds of research commu-*

nication; it will be useful for us in the PhD-project and later in the research carrier.

Example quote: I learnt two important things: the technical aspects of poster production in Power Point, and how to use the poster visually. The latter I did not learn that much through producing my own poster, but through looking at all the other posters.

Example quote: To be short. To think of design.

Example quote: Steep learning curve since I have not produced a poster before. I am proud of producing an OK product without help. I have learnt enormously, but I also used much time. It was a strong learning experience as well technically as connected to the topic, because you have to learn to present the project with few words. This made me really understand what I am elaborating. When it comes to the technical aspects I should have contacted a professional. I used much time on understanding power point and Google graphics.

B) The presentation situation

Some commented on the learning during the poster mingle because of feedback from other doctoral students and supervisors. Some commented on their shortcomings and their potential for development of presentation skills. Others mentioned the learning from watching other students' posters.

Example quote: Feedback during the posters mingle session. The mingle session could have been longer.

Example quote: It was useful work, which made me think of communication, conveying results, and partly also to popularize the topic. This also contributed to my own research process – what I try to find out about – how I work (method) and when I advance a bit in my process what my results are and how I shall present them.

Example quote: I think I learnt a lot about how to present my topic in a short and clear way, even if I did not completely manage to do so. In retrospect I can see a potential for improvement and I look forward to producing a new poster.

Example quote: *I got a better overview of my own PhD-project. It was also rich learning in acknowledging the potential of the poster presentations even if I do not have the technical skill to produce so advanced posters as those I saw at the presentation session.*

Example quote: *I have found a core in the project, a core which I can show to others, and that is a huge advantage. The poster now hangs on the wall in my office, and can be presented to all who wonder.*

Example quote: *I have learnt how little time you have to catch the interest of the reader and how active you must be to accomplish that. I also have learnt that for further paper presentations.*

In conclusion, the lessons learnt are of a transformative kind in the research process. The forced concentration and the visual design has been a vitalizing element in the doctoral students' thinking of how to communicate research. In the last open question we asked for critical comments and suggestions for the future.

Critical comments and suggestions regarding the poster task and presentation

There were 12 answers to the question: *Something that should have been done differently?* Most of the answers contain suggestions for further development of the design of the poster task and of the presentation. There are three comments on the poster mingle session, and two of them are somewhat critical, but one positive.

Example quote: *The posters mingle was a bit chaotic and unstructured, and the poster workshop at the seminar was, too short and not fruitful. That said, I had great learning of substance and practice in presenting my poster for other participants at the conference. The work with the poster was fun and very rewarding for me.*

Example quote: *The posters mingle session was too short. I would have liked to look at more posters and to have discussed them, but I could not because I had to stay in one group.*

Example quote: *Joyful design ☺*

The poster exhibition at the conference site was rather tight, with one poster right beside the next one. Some suggested more space between the posters, as well as grouping according to research topic, or methodical approach in order to promote networking.

Some wanted the presentation of the award winning posters to have gained more attention, and the jury to have described the qualities more thoroughly. Some would have liked to have the quality criteria explained more in detail.

Most of the comments suggest even more attention to these kinds of training in research communication:

Example quote: Suggestion: To have more awards for different stages of the PhD-process

Example quote: I think we were followed up in a nice way, and I was impressed by the many brilliant posters my fellow doctoral students had produced. An important event in a graduate school!

Example quote: Many persons became involved in the conference in this way, and contributed, nice to have a poster that is yours!

Example quote: We should be given one more chance to produce a poster, now when we have learnt a lot!

Conclusion

The themes arising from the analysis of the aspects the students pay attention to in their comments are visible in the researchers' categorizing of the poster presentations in four categories: focus on appealing title, focus on visual elements, focus on text, and mixed focus. The characteristics of research communication through posters are the necessity to think in a non-linear way and to be able to flip flop with alternate focusing on one aspect, and adjust it to the other. The creative challenge is this flip flopping between paying attention to more artistic elements and to the substance of the research project – and to focus on the communication situation. In a poster design and in the mingle situation with presentation, hybridity is described as a vitalizing element (but without the use of the term hybridity among the students). The learning experience also connected to the design process, as the mingle sessions with presentations are experienced as trans-

formative learning experiences with the wish to further develop the competence achieved.

References

- Evans, M. (2006). *Innføring i dramaturgi*. Oslo: Cappelen Akademisk Forlag.
- Halliday, E. (2012). *Scientific Communication: Presenting a Poster*. Retrieved November 05, 2004, from <http://www.jyi.org/SCC/Article.php?articleNum=106>
- Jewitt, C. (2009). *Handbook of Multimodal Research*. London: Routledge.
- Kress, G. (2010). *Multimodality*. London: Routledge.
- Leith, S. (2012). *You Talkin' to me?* London: Profile Books.
- MacIntosh-Murray, A. (2007). Poster Presentations as a Genre in Knowledge Communication: A Case Study of Forms, Norms, and Values *Science Communication March 2007 28: 347-376*. Retrieved December 01, 2012, from <http://scx.sagepub.com/content/28/3/347.full.pdf+html>
- Miller, J. E. (2007). Preparing and Presenting Effective Research Posters. *Health Serv Res.* 2007 February; 42(1 Pt 1): 311–328.doi: 10.1111/j.1475-6773.2006.00588.x (Accessed 1.12.12).
- Russel, C., Gregory, D. M. & Gates, M. F. (1996). Aesthetics and Substance in Qualitative Research Posters. *Qualitative Health Research*, 6(4), 542-552.
- Strømme, A. (2012). *Poster presentation instructions*. Trondheim: NTNU.

This article has been subject to blind review.

From Accountability to Cultural Pedagogy and a Professional Space for Teacher Education – a Symposium Presentation

Anna-Lena Østern, Norwegian University of Science and Technology, Norway

Johanna Ray, TUM School of Education, Munich, Germany

Hannah Kaihovirta-Rosvik, Åbo Akademi University, Finland

Thorolf Krüger, Bergen University College, Norway

The symposium as an academic conference genre is characterized by a rather spacious thematic umbrella, under which different perspectives of the chosen theme can be explored. The symposium described in this article is a result of the international network cooperation within the frames of NAFOL¹. The symposium form is supposed to give the participants an opportunity to dwell within a theme for a longer time than the traditional paper. An added value to the symposium is given through the interactivity provided by a discussant, a researcher that in advance has read the presenters' papers and has prepared a response. In this symposium the notions of accountability and cultural pedagogy are connected to the concepts teacher professionalism and professional space. By conceiving of teacher education in a spatial way and understanding its topography, extension and dynamics in these terms, it becomes possible to grasp the genesis of different terms and also how they are given specific and privileged meanings. This spatial approach can also contribute to the understanding of formative mechanisms and how they can be changed, for instance by "re-furnishing" the space. This also applies to the term "accountability", and it is necessary to consider

¹ Symposium at EARLI conference in Bergen 15. June 2012

where this term came from, and where it got and gets its material support. Many such questions can be raised and approached by taking the spatial approach.

Key words: Symposium Umbrella, Culture Pedagogy, Formative Mechanisms, Spatial Approach to Professionalism

General description of the symposium

In this symposium the theme cultural pedagogy will be addressed from three different national perspectives (Norwegian, German and Finnish), but the common focus is culture pedagogy as a means to promote cultural literacy in teacher education and further in education. We will lift to the forefront what kind of perception of the concept accountability might be implied in culture education. We ask what kind of space is given for cultural pedagogy in an era of accountability? We will direct interest to the competencies needed by teachers in order to structure teaching and learning where arts and substance knowledge are combined. Our point of departure is that arts subjects and pedagogy must be given equal importance in the learning processes which are explored by means of arts and by means of pedagogy. We furthermore point to the necessity of developing assessment tools, which take into account the learning potential in arts and through arts. This means that there is a need for reconsidering the concept of knowledge as well as the concept of learning. As we are informed by multimodal meaning theory (Jewitt, 2009; Kress, 2003) the concept meaning expansion will be central in the symposia papers presented. The space offered to culture pedagogy has been hitherto a rather marginalized space, but with a growing interest in different semiotic modes contributing to knowledge development, we suggest that the concept accountability will be renegotiated in order to include the perspectives from culture pedagogy as means to achieve cultural literacy. Cultural literacy will be discussed as a concept of 'Bildung' for today and for the future, because in an increasingly globalized world the skill to read the world will be central in education.

Expansion of meaning potential in multimodal exploration of a theme

In her presentation Anna-Lena Østern took an example from a research and development project "SPACE ME – about man in the universe".

In this project art, natural science and pedagogy were organized like a rhizome in order to support and create learning paths (Selander, 2008) for becoming teachers, as well as for students. In the symposium the design of the empirical study connected to the project was presented. The research problem formulated for the study was: What kind of learning spaces can be identified in a formative intervention combining art, natural science and pedagogy? Multimodal meaning theory (Jewitt, 2009; Kress, 2010) and transformative aesthetic theory (Dewey, 1980) formed the theoretical lenses through which the design and the learning paths were described. Carey Jewitt (2009) writes that a point of departure for multimodal theory is the equal cognitive value of different modalities. Multimodal theory has destabilized existing thought patterns about how humans learn. A modality is a semiotic sign, a carrier of symbolic meaning. Our oral language, the written expression, music, gestures, dance, film, visual expressions, architecture and three dimensional artifacts are examples of different modalities. When an expression is transformed from one modality to another it is called transduction (Kress, 2010). This transduction makes a meaning expansion possible.

The presentation ended up in focusing on the expansion of meaning potential in a dance – the scenography-video-performance SPACE ME, created in three parts connecting to themes elaborated, in arts as well as science, earlier in the project period 2011-2012.

This combination of the openness of artistic exploration, the knowledge base of science, and the educational aims of pedagogy in rhizomatic formations (cf. Deleuze & Guattari, 2004) introduced a wide concept of knowledge. The concept included the semiotic resources of different modalities as amplifiers of meaning potential, which might make the knowledge achieved multilayered and complex. This was considered a cultural pedagogy for both teacher education and education in general, promoting cultural literacy as a way to read and understand the world. Cultural literacy was discussed as a necessary change in the landscape of education and learning. The Swedish researcher in multimodality, Selander (2012), was quoted regarding these changes due to increased migration and increased use of digital technologies:

We seem only to be in the beginning of the transformation towards new institutional patterns and new communicative processes in society. The major shift in relation to learning is that the learner becomes a producer of information, compared to the hitherto dominated pattern of learners as consumers of information. Teacher and students, among others, will also

become designers of their own environments, flowcharts and learning paths. A new epistemology seems to be needed if we want to be able to conceptually grasp how knowledge is formed and transformed in different social domains. (Selander, 2012)

A core concept in the research project connected to SPACE ME was affordance, defined as meaning potential. Through work with creating a meaningful form, like in aesthetic activity, with transformation as a central tool, a meaning expansion was made possible. In the symposium the notion of accountability was brought into dialogue with the expanding concept of knowledge formed through the learning paths in this form of culture pedagogy as part of teacher education.

Culture pedagogy through the lens of educational research (Bildungsforschung)

In her presentation, Johanna Ray reflected on culture education and the assessment of cultural literacy in the light of the OECD Programme for International Student Assessment (PISA) and empirical educational research (Bildungsforschung). During the last decade, the field of Bildungsforschung has received considerable attention in Germany. One of the main reasons for this is the indisputable gap between Germany and top performing countries that comparative surveys like PISA – the “flagship” of empirical educational research – have revealed. The poor achievements by German students and proven disparities, for example in social or ethnic background, sex or region, have stressed the importance of empirical studies on learning quality and quality development. There has been an accentuated need and explicit demand for empirically grounded findings regarding relevant conditions for learning and teaching (see, for example, Prenzel & Alolio-Näcke, 2006).

Bildungsforschung is not primarily to be understood as a discipline as such, but as an interdisciplinary field of research. Empirical educational research, in short, aims at providing knowledge that helps to better understand and to further develop the educational reality (Bildungswirklichkeit). Typically, many relevant questions raised by empirical educational researchers can only be efficiently addressed through contributions from diverse fields. As Manfred Prenzel (2005) stresses, empirical educational researchers by definition deal with a wide range of various aspects concerning learning premises, learning processes and learning outcomes

throughout the lifespan, within as well as outside formal (educational) institutions.

The possible impact on teachers and on the quality of teaching, as stipulated in the description of the conference theme, that the constant pressure to respond to standards and deliver results defined by politicians and international processes might have, appears to be a particularly delicate theme when it comes to arts and cultural education on the one hand and PISA on the other. The presentation included examples of teacher voices on the dangers of the overemphasis on testing and accountability promoted through PISA.

Based on the fact that domains like mathematics and science have such a prominent position in the PISA study, Ray elaborated on the actual space for arts education and the development of culture literacy in an era of accountability. Examples of recent research focusing on the question of how PISA can be extended to include cultural education was given (Wimmer, Nagel & Schad, 2012) as well as a discussion of in what sense PISA actually already contains such elements (cf. Prenzel & Ray, in press). In particular, the specific challenges related to the development of assessment tools that consider the learning potential in arts and through arts were discussed. It was argued that not only scientific, mathematical and reading literacy, but also cultural literacy should be a central educational outcome. The professional space of teachers, as described by Thorolf Krüger in his up-summing discussion, should include such elements.

There are, as Ray stated in her presentation, certain challenges when trying to draw on test methods and methods of collecting data used in PISA within the field of cultural education. This should be taken into account in research aiming at international comparison of cultural literacy. With reference to the typical approach of *Bildungsforschung*, one urgent and challenging research task is the theoretical differentiation of prerequisites, processes, effects and outcomes of cultural education paired with empirically grounded descriptions.

Body language, training brains and knowing by heart

Teacher students' active aesthetic response to visual arts based cultural pedagogy education, in a Finnish teacher education context, were focused on in Hannah Kaihoviirta- Rosvik's presentation. In art education none of the methods or techniques in themselves produces sustained art interest, motivation or learning unless the goals are realistic for the learner. Ordi-

narily, people will in learning choose activities of intermediate uncertainty rather than those that are difficult. Having learners assist in defining goals of art based learning increases the probability that they will understand them and want to reach them.

Kaihovirta-Rosvik discussed in which ways becoming teachers were able to identify the pendulum between art as experience and art as knowledge in art based learning and understand its effect on education. She articulated practice based research and interpretations of teacher students' art based assignments in multimodal learning. In this particular assignment teacher students were asked to use a digital slide show as a tool for articulating a response to their experiences from a visit to a contemporary art exhibition. The concept of aesthetic response in this assignment was borrowed from literary theory and transferred to a cultural reader response activity. Concretely, the students were asked to approach aesthetic response as a way to formulate evaluation in education by drawing attention to aesthetic elements in learning situations. One task in the assignment was to reflect upon how learning situations, teaching materials and methods can relate to senses and emotions.

Kaihovirta-Rosvik investigated how aesthetic response created meta-perspectives on learning experiences and how students' sense of aesthetic choices became visible in relation to what they wanted to express. The students' spontaneous reaction when creating the slideshow was that they surprised themselves with their aesthetic knowledge.

Additionally, Kaihovirta-Rosvik investigated how aesthetic response to art based learning occurred at multiple levels: emotional, cognitive and cultural. The students took advantage of collaboration and digital media when they re-created individual and shared experiences. To revisit documentation and past art based learning situations with an aesthetic approach articulated with a handy digital program, created time and space for the students to monitor their own contribution to cultural interpretation. This encouraged them to express multiple meanings and interpretations of how they in future envision cultural pedagogy.

The mandate of the teaching profession and the forming of a professional space

Thorolf Krüger was the discussant for the papers presented. His comments focus on three key aspects of teacher professionalism: the mandate, the knowledge demands and the interrelation between teacher education,

professional practice and research on the teaching profession. Finally, he considered the term “professional space”, expanding upon the meaning of space as used in the title of the symposium. These comments will also, implicitly, address central concepts from the session: accountability, multi-modality, the expansion of meaning, transduction, culture pedagogy, affordance and cultural competence.

Teacher education is basically about developing teacher professionalism. In the wake of the papers and topics presented, an issue Krüger raised was the following one: “How does cultural pedagogy in teacher education relate to the notion of teacher professionalism?”

The mandate of the teaching profession

Professions can be understood as collegial occupational organizations that serve society in distinct ways. Central to the teaching profession, as to other professions, is the mandate in relation to society. The mandate in relation to teachers’ work is concerned with the development of student teachers’ capacity to educate (or culturally form) young people. To carry out this task, teachers have to be able to identify, understand, create and organize conditions that facilitate such Bildung/formation. They also have to be able to handle technological innovations and new patterns of communication and participation, as well as comprehend how such trends and elements create changing conditions for growth. So – what we have heard today concerns not simply one marginal aspect of teaching and learning related to, for instance, science, and art or culture pedagogy; it is part of the core of the teaching profession and of education in general. It should not, of course, be necessary to mention this, but I think it cannot be over-emphasized.

The knowledge demands of the profession

Teacher professionalism implies being able to deal with the specific knowledge associated with one’s profession. This, for teachers, means not only being well-acquainted with knowledge related to teaching, but also being able to understand, demonstrate, articulate and advocate this knowledge. This is of, course, a special challenge when the discipline is not one single one, but a tapestry of multiple disciplines, as we have heard today. It is important to develop, as is done here, relevant concepts that will enable us to grasp the problem, rather than simply adopting those used in other disci-

plines or knowledge traditions. It is also important to develop concepts that are suitable to assess what is going on based on one's own premises. Such concepts not only frame and delimit what can be seen, but also provide opportunities to understand and learn new things. The rhizome as a metaphor for knowledge is mentioned, as well as the new epistemology which suggests that the learner be viewed as the *producer/designer* of knowledge and not simply as the *consumer*.

One important aspect of teacher professionalism is “the noble art” of practicing discretion, didactic discretion. It is possible to regard this discretion as a very specific knowledge aspect of teaching practice. A great portion of teachers' everyday practice is about assessing challenges in often very complex and indeterminate situations, in which there are no established rules to follow in taking action. To make decisions, one has to practice *prudence* – which means taking in a great diversity of semiotic signs in one single “moment”, in order to lay the foundation for responsible educative actions. Such prudence, I think, is based upon normative frameworks generated from cultural competence.

The professional complex – challenges for research

The texts at the symposium, and the presentations as well, have directed my attention towards another central notion and standard of teacher professionalism: Talcott Parson's notion of “the professional complex”, which concerns vital relations between education for the profession, professional practice and research on the profession.

In facing this “professional complex” many crucial research issues arise, and many of them can be gathered under the heading: research formatting mechanisms. What forces operate to produce certain notions of what is considered scientific? How is one to perform artistic research that counts towards the institution's “publishing credit table?” To what degree are researchers being trained to document this kind of research? What formats are considered legitimate for masters theses or doctoral dissertations? How do infrastructure, equipment and governing systems facilitate and prioritize certain rationalities? And with regard to today's topics: how, for instance, do teachers and other central agents conceive of “multimodality? I remember the journalist who ridiculed the term “multimodal texts” in the Norwegian teachers' magazine “Utdanning”. His article was entitled: “Norwegian language curriculum *in English*”, since he could not find the term in his Dictionary.

I think it is important to struggle with the concepts and categories through which we articulate our research findings and organize our thinking: those that predispose our conceptions and actions, and through which we reflect epistemologically on the premises and limits for the knowledge we develop. “Accountability” is one such concept that is applied in order to “make visible” the way the profession administers its mandate. In fact, I think that the term does not threaten cultural research very much, for instance, as it is defined in Collins Cobuild Dictionary(1990, p. 9):

- a) If you account for something that has happened or for something that you have done, you explain how it happened or why you did it; if you are accountable for something that you do, you are completely responsible for it and must be prepared to justify your actions.

- b) An account is a written or spoken report that gives you the details of something that has happened.

However, the way in which “accountability” is employed as a core metaphor in contemporary educational research takes on a different and provocative meaning. So perhaps the term should be de-constructed, or, as Wittgenstein suggests, be taken out of conventional use, washed and then put into use again.

The professional space

The term “space” is applied explicitly in the general text of the symposium and also in both Anna-Lena Østern’s and Hannah Kaihovirta-Rosvik’s presentations. To follow up this meaning expansion, I think the term space can also be understood in a wider sense, to mean a cultural-ideological space. According to such a meaning, teacher education can be considered both as positioned within a large curricular space (where, for instance, PISA represents one element), and, at the same time, as being constituted by many minor sub-spaces. In the latter spaces, too, power operates to construct what is considered right or wrong, legitimate, reasonable, central, marginal, etc.; and it also operates to fashion what is taking place and to construct subjects and objects in certain ways. By conceiving of teacher education in such a spatial way and understanding its topography, extension and dynamics in these terms, it becomes possible to grasp the genesis of different terms and

also how they are given specific and privileged meanings. It can also help us to understand formative mechanisms and how they can be changed, for instance by “re-furnishing” the space. This also applies to the term “accountability”, and we need to consider where this term came from, and where it got and gets its material support. Many such questions can be raised and approached by taking the spatial approach.

Conclusion

The papers and their topics concern central aspects of teacher professionalism. There are many other such aspects that might be touched upon such as authority, professional identity, professional relations, etc. It should be stressed that the standards set by theories of what is considered a profession are not written in the stars. They are socially and culturally constructed and should be challenged, and, if necessary, continuously re-constructed.

We need a strong teaching profession, a profession that is able to challenge the basis of its own epistemic existence and profile. And I think the projects we have heard about today, and the concepts and styles of reasoning that they manifest, make a valuable contribution, directly or indirectly, to such a challenge.

References

- Collins Cobuild English Dictionary* (1990). London and Glasgow: Collins Publishers.
- Deleuze, G. & Guattari, F. (2004). *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Athlone Press. (First published in French 1980, in English 1987; translated by B. Massumi.)
- Dewey, J. (1980). *Art as Experience*. New York: Pedigee Books. (First published in 1934.)
- Jewitt, C. (Ed.) (2009). *The Routledge Handbook of Multimodal Analysis*. London: Routledge.
- Kress, G. (2010). *Multimodality. A social semiotic approach to contemporary communication*. New York: Routledge.
- Kress, G. (2003). *Literacy in the New Media Age*. London: Routledge.
- Parsons, T. (1978). Research with Human Subjects and the “Professional Complex”. In *Action Theory and the Human Condition*. New York: Free Press.
- Selander, S. (2012). *Key note speaker – Staffan Selander*. http://www.didaktikdesign.nu/dfl_keynotes_staffan.htm (Accessed 22.1. 2012)

- Selander, S. (2008). Designs for learning and the formation and transformation of knowledge in an era of globalization. *Studies in Philosophy and Education*, 27(4), 267-281.
- Prenzel, M. (2005). Zur Situation der Empirischen Bildungsforschung. In *Impulse für die Bildungsforschung. Stand und Perspektiven. Dokumentation eines Expertengesprächs* (pp. 7-21). DFG: Akademie Verlag.
- Prenzel, M. & Allolio-Näcke, H. (Eds.) (2006). Untersuchungen zur Bildungsqualität von Schule. Abschlussbericht des DFG-Schwerpunktprogramms. Münster: Waxmann.
- Prenzel, M. & Ray, J. (in press). *Bildungsqualität, Bildungsforschung und Kulturelle Bildung*. München: Kopaed.
- Wimmer, M., Nagel, T. & Schad, A. (2012). Wahrnehmung und Nutzung kultureller Angebote durch Schüler/Innen (pp. 285-307). In F. Eder (Ed.), *PISA 2009, Nationale Zusatzanalysen für Österreich*. Münster: Waxmann.

Teacher Education between National Identity and Global Trends

Panel Discussion at the NAFOL International Conference 15.05.12

Chair: Kari Smith; resumé: Anna-Lena Østern

Kari Smith: *Some of the main goals education strives to achieve are certification and socialization. To achieve these goals in the best interest of the individual and society is a demanding challenge for all involved. Yet the task becomes even more complex when seeking answers to questions such as in what context is the certification going to be used and into what society are the educatees expected to socialize? Teacher education is at the heart of the discussion as it is responsible for educating teachers whose task it will be to certify and socialize a new generation into a society, the nature of which is, to a large extent, still unknown. Is a teaching certificate issued in one specific country valid in that national context only, or can it be accepted globally by the international community? Are standards for teaching generic and have cross national value, or are the expressed standards nation-specific? Can we reach a global understanding of 'the best pedagogy of teacher education'? Should a teacher educated in Norway be certified to teach in Tanzania, and vice versa? Members of the panel are asked to share their views with the audience. Another issue to discuss is the issue of socialization. A person is socialized into a specific, definable society. What are the borders of this society? National borders? Religious borders? Ethnic groups? Language? Geographical areas etc.? Should teacher education aim at socializing teachers-to-be into a national or global society, and whatever the answer is, what comes at the expense of what? This becomes*

an even more crucial question when introducing the Norwegian 'dannings' (German "Bildung") perspective into the discussion. Is the Bildung perspective more confined by national and cultural borders than, for example, the content specific and the pedagogy of teaching?

The panel speeches

The panel members were requested to relate to the above issues and questions in their introductions. In the following section the points from each panel participant is summed up in their own words.

Elaine Munthe took as a starting point that “proximity leads to more complexity”: the closer you get to teacher education as a researcher, the more diverse and complex teacher education becomes. This brings up a question of: What can we study at a global level and what can't we? What are the boundaries, limits of our own research methods, of our own understanding, of the perspectives that we can take? Once we start posing such questions we are involved in questions about ethics, research ethics since this is intertwined with the validity of our research.

This is also related to the question of whether it is possible to develop common standards for all. Here I believe it is important to make a distinction between principles and standards. For instance, research has, to date, been fairly conclusive that engagement is important for students' learning. As a principle, this might apply globally, for all education. Standards tend to also describe what is expected concerning how to teach and they might be more local. Creating engagement with 60 students versus a classroom where you might have ten or even just two students will be different.

On the other hand, the discussions about standards are important, and I think they may be more important than actually arriving at established standards. This is interesting on a global level because by discussing standards across countries, we are discussing what we expect of teachers and teaching, we discuss important issues for education. These discussions can also bring about awareness of what is *not* expected of initial teacher education, what initial teacher education cannot do and what kind of learning needs to take place in the continuum of teacher education.

Marilyn Cochran-Smith: It seems to me that in terms of teacher educator practice and research and policy it's not really either a focus on national identity or a focus on global trends. We really need to give attention to both

of them, and think about how they relate to one another. With research on national teacher education issues, we have to understand these in terms of global trends, and we have to connect them to global trends. An example globally is the prevalence of neoliberal policies related to teacher quality and teacher preparation. As part of this, we see market-based teacher education reforms in many places with an accountability bottom line and a business or corporate perspective. This is different from the way we used to think about teacher education reform prior to the 1990s. In April 2012, I was part of an international panel on the policy and politics of teacher education, and on that panel we had papers written about the teacher education policy climate in England, Ireland, New Zealand, and the U.S. Our discussant was from Chile. In all, we had five national contexts represented that are very different from one another. They all talked about neoliberalism as a major global trend in what was happening in terms of policy and practice and in terms of major changes that were taking place. If we want to understand “the national” (or, more accurately, “the nationals”), we have to understand the global. A second point is the flipside of the first. And that is to do research and to understand global trends related to teacher education practice policy. We have to acknowledge and understand multiple nationals, which is related to the whole issue of increasingly diverse student populations. The third thought that I wanted to mention is about teachers and teacher educators’ roles as implementers of national policy, which they may not agree with, and they may not have anything to do with, in tension with teachers’ and teacher educators’ roles as advocates and people who are involved in trying to speak up for social justice and for changing the systemic aspects of education systems that perpetuate inequities. So here is my idea — and you have probably heard this phrase before — teachers and teacher educators need to work simultaneously within and against the system — that is, working within the structural arrangements and the school or educational organizations in which they work — and at the same time working against those structures. So what does it mean — to work both within and against? As teacher educators, we are trying both to work against institutional structures that perpetuate inequities and also teach others to do that. My last thought here is that as we have more and more discussions about national and global perspectives, we really need to be careful not to forget the fact that ultimately teaching is local. It’s not national or global, but local—that is, teaching is a deeply relational and almost intimate activity and process and relationship that occurs between teachers and students. And so I think that we need not to forget that a lot of the knowledge that teachers and teacher educators need to have is

local knowledge that is constructed in communities of educators working in similar local communities that both construct and share knowledge. Communities make this knowledge available for others for critique and to sometimes make it useful beyond the local context in which every teacher acts.

Svein Lorentzen: My main field for research has for many years been changing national identity in education, and particularly in text books. In sorting out teacher education research between national identity and global trends I will like to point out two sets of quality standards: one easy and one more problematic. The first and easiest one would be the standard of what is called academic quality. This one will include academic discipline competence at a distance from pedagogical competence. Important research would be on teaching and learning processes, organizational matters, classroom leadership, special education needs in particular, student groups, etc. The second standard, the more problematic one, would be on the civic quality in teacher education. This variable is in my head the question of democracy, human rights, meta-perspectivity, for instance with regard to ethnicity and religion and national values. Those are universal values, but in many societies national values are often contradictory to universal ones. In a number of nations and states national identity is made remote through education, with advocates, specific ideologies and religious beliefs through a systematic distinction between the “wes” and “theys”. Research into this civic dimension of teacher education is more problematic, but perhaps the most interesting and challenging. And not only in a less democratic society I think, also in our open, pluralistic, popular world it is more than easy to identify fields of research where critical questions would challenge problematic parts on national identity practices. A pressing matter would be to study identity in rapidly changing societies, asking questions like: How does a growing diversity affect education, in general and teacher education in particular? The kind of teacher education research I would like to see is along the line of Marilyn Cochran-Smith’s brilliant key-note, critical research addressing the less obvious, more controversial issues of education. And above all, increase the amount of research not only on teacher education, but also within teacher education. It will ensure that the necessary research quality is an important part of education. Titles like national identity in transition are already on the research agenda in sociology and political sciences. Globalization is a key word in such processes. In other words, the two conflicting headlines national identity and global trends in many ways fit together, and are indeed a challenge to researchers in teacher education.

Kristin Barstad: Different views on substantial and existential issues might be so different that an important question for teachers and teacher educators is how to address all with other opinions not compatible with the Norwegian ‘danning’ (Bildung) perspective. ‘Danning’ has to do with moral and ethical education, for instance concerning the philosophical question of what the human being is, and what should it be. How do we educate future teachers to meet different pupils, how do we meet the challenges of tomorrow, how do we maintain a future development of democracy with the ability to think critically about knowledge? We have to link knowledge to value, and link knowledge from different disciplines together. As teachers and teacher educators we are in the middle of very important work aiming at educating for citizenship (Norwegian ‘medborgerskap’). As humans, people with family and children travel worldwide and bring their culture, religion, language and traditions and questions concerning, these issues are intertwined with values. Which values, traditions and habits may easily live side by side and which may not? And how do we communicate and how do we solve this education and daily live in such in such a multifaceted picture – these are the questions I think we are confronted with.

Per-Olof Erixon: I will remind all of us that there is no place that we can call international. It consists actually of a national context. And I think this is a very important reminder because the first reflection I make is that teacher education in itself is a national project. There could be local interpretations, but it is based upon national policy, intimately, and I would say, connected with cultural history. And I would say that teacher education is almost like a language in itself. Therefore I presume it is so difficult to learn about others, how teacher education was in another country, and in another setting, and another national context, also how schools were in other countries. But research in this sense is by definition international and research is a matter of exchanging ideas, results and theories. To do this, we have to communicate. And it is something that is very basic in academic work; that is, that we write texts and also meet in conferences like this. We build networks and exchange experiences, like today for example. And this is fantastic isn’t it? This is some sort of international community, but it is also problematic. Because we, when we communicate like today, we communicate in another language that is nationally rooted in another country, to me: in English. But English is not my mother tongue. It belongs to another national context. And that is why it might be difficult to communicate without this problem, that all is connected to communication. We all know now that language is not just surface linguistics. Language is also, for the most I would say, rather

a view of the world. It is the package of all, I would say, history, experiences in history. Some sort of interpretation of the world. So, this means that when we come from another national context, we have to adapt and adjust to issues and ways of thinking which are not part of our national context. We have to adjust to another national language. That means that we probably don't mean the same thing. We know for sure that 'Didaktik' is a German concept with a capital letter; in English it means something different, and in French something different also. But when it comes to concepts, when we think we have the same image of, let's say knowledge, freedom, content, pedagogy there might be problems. But at the same time we have to find solutions to this. The solution is very much in line with what Marilyn said. To me it is very important to develop national identity in research connected to teacher education. At the same time I try to communicate my findings and my reflections out of the national context in an international setting. This is important for many reasons. If we don't develop a national perspective in the research of teacher education, we will have less to communicate internationally. The concept of international consists of national contexts. Therefore we have to develop the national at the same time as we develop the international communication of teacher education.

Stella Damaris Ngorosho: When we talk of globalizing the teacher education, then we have to think of principles and the ways to harmonize the economic situations (harmony between economies of the developed and developing countries) and the varied values attached to aims of education in different nations. The values of education are country specific and they articulate the very specific knowledge, skills, values and attitudes of each country (as a matter of experience). The provision of education reflects to a large degree the state of economy of that specific country. The main focus of education in Tanzania is on access, quality and equity (attainment of sufficient and effective education and training to all the citizenry of Tanzania), whereas England is emphasizing liberal and elitist values of education. In that way certification for Tanzania should reflect the country's education system. I would not expect a Tanzanian teacher trainee to embrace the values of England's teacher education. Globalization has both positive and negative impact on education, but we should focus more on the internationalization of education values so as to support the growth of educational goods and services.

Ulla Lahtinen: I would like to take a very concrete example. If I am an educator and became a teacher in Finland by a five year master's program in which I have learnt psychology, different kinds of psychological stuff, I have learnt mathematics etc., and I think I am very well educated to take care of a group of children, teach them, get them to learn to read and write. Then, what if I moved to Tanzania? I would come to a class with one hundred, even 120 children, maybe five or ten books for the whole class and if I tried to teach the children something, I think I would feel really stuck, I could not manage at all. When I look at the Tanzanian class teachers that do this job, I heard what Lee said here that Damaris' presentation was really a sad story, and he said he would cry, and yes, of course I cried many times when I saw these children in the school and saw the hard work. But I must say that it was also a success story. I cannot understand how these wonderful teachers really managed to teach these children something. At least half of the group could manage to proceed to the following grade. I think these teachers do a wonderful job. And although I had a good teacher education, I could not manage in that environment. I can see that the context is so important to know. I think the local is something that we cannot go around; we have to know the local situation, the local community. And as Marilyn said: everything has to do with what is in the room. And also what is just around the room, the walls and so on. So I think during the years in Tanzania I have learnt a lot, and I have learnt that I cannot do anything there if I don't learn to know the community and how it works. Another thing I would like to point out that maybe has to do with this global situation is that we learn, as Lee said, from things that don't go well. We can be in any country with these more and more diverse populations. If you really want to learn when things don't go well, when children or adults have problems, we analyze what is the reason, what is the problem, then we can learn something also for the global; from other countries and for other situations. But most important is that I see the local situation, the community that we have to learn about. What then can be more common and what we can use in all countries, it's what Lee called habit of mind, practice and hearts. That is something that is important wherever we are in any country, for a good teacher. But we cannot build standards based on that. To get to a standard, you have to develop that within yourself during teacher education and during your life. So I would just like to say that the local situation, the local community, is the main thing if we will understand the global situation.

Lee Shulman: How many of you are familiar with the character Superman? Well you know one of the principles in pedagogical content knowledge and

pedagogical representation is that one should not use concepts that are less familiar than the concept you are trying to make understandable. I begin with two simple thoughts. One is that the notion that we have an identity being national or global or religious or ethnic is a mistake. The certification to teach, the compassion to teach is inherently local. And that paradoxically, as Ulla said, if you can say these habits of mind, practice and heart are universal, then we have the interesting saying that the features of the compassion to engage in the activity are universal. They are like three baskets, they are interwoven. But which combination going into the baskets for different teacher purposes in demand would be quite different. That's the general couple of ideas. So let me try to elaborate them a little bit. Let's think about Superman. We all know about Superman. Superman in daily life is a newspaper reporter named Clark Kent. And his girlfriend is Lois Lane. Okay. How does he transform back and forth? In a telephone booth, which we do not find in our streets any more. I think it is a serious problem for Superman. Why do I mention Superman? Because I asked you to consider, what is a real identity. Is he really Clark Kent who assumes this shadow identity of Superman? Is he really Superman who pretends to be Clark Kent? Which is his identity when he dates Lois Lane? Or is each of these identities coequal, interacting, intermingling aspects of an identity? In other words, Superman is an example, a portfolio of possibilities. Not a single, integrated, internally consistent whole. And I fact, isn't it interesting that Superman Clark Kent is more effective in the world because he isn't just one thing, one identity, because he has capacity to draw on different parts of his repertoire of selves. Isn't it the case that the larger the repertoire of selves we have the greater are our capacity to act in the world. And therefore in consistency in coherence which is our educational goal, we have created this advantage to someone operating in the global society. I asked you to consider it, for example, when you and I discovered last night that we could speak Hebrew to one another. I had not in Norway expected that the Hebrew speaking part of my identity would be invoked. But when it was, it wasn't just the syntax, semantics and phonology of Hebrew that was invoked. A whole set of personality characteristics, expectations, isn't that right? And you know, we talked about language: haven't we had students who we think we understand to have a certain kind of identity, and we never think much about the fact that they are native speakers, that they are working in Norwegian or in English. I will argue for us that identity should be thought of as a multiplicity of selves that can be tried, that can be expanded into a growing human being. It is our job as educators to try to increase the size, the flexibility and usability of the identities, especially of

the teachers we prepare and the kids they teach. Now about certification, I will just make a couple of comments. One is, isn't it interesting that those of us with PhDs, once we received our PhD we were considered competent to teach our subject anywhere. I received my PhD 49 years ago. If teaching is inherently local how can we make this assumption about PhDs without any questions? Either it's crazy that we are permitted to teach, or that the notion of certification, neither global or local exclusively, is like so many other things situational, and one has to look at it case by case as either very local or quite across boundaries. I would simply make the final observation with regard to the certification of teaching. As some of you know one of the research and development projects that my colleagues and I did at Stanford was to develop something called the National Board for Professional Teaching Standards – an assessment of competent teachers in the USA. There are now over one hundred thousand board certified teachers in the USA. The mode of assessment, the heart of the assessment, is not a test of the conventional kind. It is a teaching portfolio that unfolds in a teacher's own classroom, in their context, over a period of one year. Highly structured so it can be compatible for teacher to teacher, but the assessment is of a narrative of pedagogy of teaching and learning captured contextually in particular in that teacher's own classroom. The standards are general; the portfolio, however, is quite local and particular in person. So should the certification of a national board teacher be general or particular? I leave it there.

Discussion and conclusion

Kari Smith: We have now heard several professors speaking. However, I think we have heard important witnesses here, and before I take this any further I would like to open the discussion to the floor, and I will just ask as many as possible to participate in the discussion but to have brief, concrete questions and to the panel a brief, concrete response.

In the discussion two issues of special interest were addressed: the connection between policy and research, and the language of research. The connection between national policies and research was considered very selective. The need for research that can inform policy was mentioned as relevant both nationally and internationally, even if policy makers often read research in a very selective way.

One of the challenges for research within pedagogy would be to broaden it up, to have more diversity in methods and approaches. A very much

a wider range of methods and approaches, particularly crossing borders between pedagogy and other disciplines was asked for.

The language of research is also a political issue, and in, for instance, Norway policy makers warmly speak of using the Norwegian language in research. However, the Norwegian Research Council demands texts written in English. We have to recognize very different national cultures.

Kari Smith: I think that as a conclusion, at least some local understandings. From the national we should approach the international. Within the international we should look for the national, within the national we should look for the local, and within the local we should look for the context and the persons we interact with.

Artikkelsammendrag på norsk (Summary of articles, in Norwegian)

Anna-Lena Østern, Norges teknisk-naturvitenskapelige universitet, Trondheim, Norge

NAFOL Årbok 2012 Lærerutdanningsforskning i spennet mellom nasjonal identitet og globale trender

Del I: Profilartikler

Nasjonal forskerskole for lærerutdanning NAFOL som respons på utfordringen om en mer forskningsbasert lærerutdanning i Norge

Anna-Lena Østern og Kari Smith beskriver i denne artikkelen bakgrunnen for den nasjonale forskerskolen NAFOL gjennom å problematisere hva forskningsbasert lærerutdanning kan bety. Videre inneholder artikkelen en kort gjennomgang av de utdanningspolitiske hendelser som fikk som konklusjon at forskerskolen NAFOL ble etablert med støtte av Norges forskningsråd som et konsortium eid av 24 lærerutdanningsinstitusjoner. Utviklingen av konseptet NAFOL ses som en innovasjon og en måte å konkretisere hva forskningsbasert utdanning av lærerutdannere er i Norge.

Om å bli vis innenfor utdanning: Mot en dydsbasert oppfattelse av undervisning og lærerutdanning

Gert Biesta drøfter den sentrale rollen vurdering har av hva som er utdanningsmessig ønskelig i utdanningens praksis i skolen. Slike vurderinger gjelder ikke bare hva, men også hvorfor; altså utdanningens hensikt. Han argumenterer for at evnen til å gjøre slike vurderinger ikke skal benevnes

kompetanser, men heller bør ses som en helhetlig kvalitet som karakteriserer lærerens profesjonelle væren. I likhet med Aristoteles kaller også Biesta dette for 'dyd', og foreslår at lærerutdanning skal fokusere på å fremme studentenes evne til å gjøre kloke beslutninger som lærere.

Utdanning etter 22. juli 2011

Inga Bostad og Lars Løvlie tar i sin artikkel utgangspunkt i tragedien som hendte på Utøya 22. juli 2011, og drøfter utdanning og demokrati. De skriver at et levende og friskt demokrati ikke er kun bygd på utdanning. Man må vite forskjellen mellom en utdannet person og en person med innsikt som er kapabel til å bruke kunnskap for å skape en bedre verden. Med dette menes at det finnes likhet, verdighet og frihet, men også rom for kritisk refleksjon der politiske, religiøse og moralske diskusjoner oppmuntres. I artikkelen drøftes det videre hvordan vi gjennom historien har sett altfor mange eksempler på vel utdannede borgere som har misbrukt sin kunnskap, handlet mot demokratiet og i ekstremtilfeller har blitt forfølgere, undertrykkere og terrorister. Dette viser oss at utdanning i seg selv ikke er noen garanti mot vold, ydmykelse og utnyttelse.

Ansvar med dobbelthet. Dilemmaer og motsetninger i utdanning

Petter Aasen konstaterer innledningsvis at ikke noe er så politisk som utdanning. Det er gjennom utdanning vi reproducerer vår kultur, våre verdier, vaner, holdninger og kunnskap – fra én generasjon til neste. Det er gjennom utdanning vi legger til rette for kulturell, sosial og økonomisk fornyelse og vekst. Derfor er utdanning knyttet til ideologi og makt på ulike måter. Den danske sosialforsker Peter Dahler-Larsen har beskrevet disse forholdene gjennom begrepene policy, politikk og det politiske. I artikkelen bruker Aasen disse begrepene i en drøfting av nye former for utdanningsstyring og hvordan disse utfordrer systemet, skolene, lærerne og lærerutdanningen.

Del 2: Plenumsforelesninger

Å utdanne lærere – et komparativt perspektiv i forhold til andre profesjoner

Lee Shulman bruker begrepet signaturpedagogikk for å karakterisere hvordan profesjonelle fellesskaper formes, og hvordan komplekse former for problemløsning og vurdering gjøres under forhold preget av usikkerhet og uforutsigbarhet. I en longitudinell, komparativ studie fant forskergruppen gjentakelse som et kjernebegrep. Det som skjedde igjen og igjen, vanene, var utrolig viktig for profesjonen. Derfor kalte gruppen dette for tankevaner, praksisvaner og hjertets vaner fordi de læres gjennom å bli utført gjentatte ganger. Gruppen karakteriserte disse vanene gjennom begrepene utførelse, kroppsliggjøring og daglig gjentakelse. Når disse er integrert, finnes en profesjonell identitet med håndens praksis, hjerte, hode, ydmykhet og håp.

Utfordringer for lærerutdanning i utviklingsland: eksemplet Tanzania

Stella Damaris Ngorosho og Ulla Lahtinen beskriver i artikkelen de utfordringene som lærerutdanningen i Tanzania står overfor; fattigdom, hurtig befolkningsøkning og vansker med å rekruttere lærere. De drøfter hvordan intensivert nasjonal identitet påvirkes av akselererende globale trender, og som en konklusjon peker de på viktigheten av å lære lærere om nyere utvikling innenfor pedagogikk, teorier og substanskunnskap.

Trender og utfordringer i lærerutdanning: nasjonale og internasjonale perspektiver

Marilyn Cochran-Smith innleder artikkelen med å konstatere at lærerutdanning er en stor utfordring globalt. Hun nevner seks utfordringer i amerikansk utdanning, og mener at disse utfordringene også er relevante for mange andre land. I sin key note snakket hun om (1) uforutsett oppmerksomhet på lærerkvalitet, (2) ulike forståelser av begrepet accountability, (3) å møte behovene til skoler med økende heterogenitet blant elevene, (4) det presserende spørsmålet om hvem som skal undervise og hvem som skal lære lærere, hvor og hvordan, (5) fokus på praksis og kliniske forhold, og (6) forskning som prioritet i lærerutdanning.

Del 3: Paperpresentasjoner av ph.d.-studenter

Motiverende, personlige og kognitive forutsetninger hos lærerstudenter – en systematisk analyse av søknadsdokumenter

Franziska Frost har sammen med sine veiledere Tina Seidel og Manfred Prenzel skrevet om søknadsprosedyrer ved opptak til lærerutdanning, som de mener tradisjonelt sett har vært dominert av kognitive kriterier. Det fins lite kunnskap om hvordan man bruker alternative, profesjonsrelevante, ikke-kognitive kriterier. I studien analyseres brev om personlig motivasjon, CV med tidligere pedagogisk erfaring og til slutt skolekarakterer. Hele gruppen på 238 studenter beskrives og en klusteranalyse viser fem distinkte grupper med alt fra utmerkede til kritiske forutsetninger for lærerprofesjonen.

Kunnskapsskaping i læreres profesjonelle utvikling: om å håndtere standarder, utforskning, og usikkerhet i arbeidet med studenters skriving

Kristin Helstad og Andreas Lund har undersøkt kunnskapsutvikling i en flerfaglig sammensatt lærergruppe i videregående skole som samarbeidet med forskere fra universitetet om et utviklingsarbeid relatert til faglig orientert skriving. Kapitlet tar opp hvordan lærere utvikler ny kunnskap om skrivepraksiser, som bruk av kilder og tilbakemelding på tekster, når læringsomgivelsene i økende grad blir digitale. Funnene viser at kunnskap utvikles over tid gjennom samtaler på tvers av kunnskapsområder og grad av ekspertise i gruppa. Ny kunnskap synes å ha gode vekstvilkår i skjæringspunktet mellom lærernes utforskende arbeid og behovet for standardisering og institusjonalisering av nye praksisformer.

Kvalifikasjonsrammeverk og kunnskapsbegrepet. Fra Aristoteles til Bologna, Brussel og Norge

Kristin Barstad analyserer og drøfter implementering av europeiske kvalifikasjonsrammeverk i Norge. I studien granskes hvilke oppfatninger av kunnskap som kan identifiseres i kvalifikasjonsrammeverkene og andre dokumenter tilknyttet disse. Barstad bruker kritisk diskursanalyse i sin undersøkelse, og hun konstaterer at det er stor uenighet om grunnleggende forståelse av sentrale begreper.

Rektors lederskap belyst gjennom perspektivene person, profesjon og posisjon

Siv Saarukka har studert rektorer i finske videregående skoler. Rektorene mangler nasjonale retningslinjer for sitt lederskap, og Saarukka har undersøkt hvordan rektorene viser bevissthet om sitt mandat. Gjennom livsførelser analyserer Saarukka rektorenes bevissthet om lederskap og hun konstaterer, at ettersom det ikke fins nasjonale retningslinjer, åpner det for rektors autonome utdanningsmessige profesjonalisme. Kvalitetsresultater kan ses som evidens på et lederskap som utøves klokt.

(Dis-)playvinduet noe for (De-)signmakere @;-)

Solveig Åsgard Bendiksen undersøker den flaten som dannes av mobiltelefonens vindu og dens estetiske potensial. En mobiltelefon kan ses som en skattekiste og en skisseblokk for designmakere i alle aldre. I artikkelen presenteres en rhizomeanalyse av kulturskoleelvers og lærerstudenters lek med skrevne artefakter i transformasjon fra mobiltelefonens vindu til papir og til en glassfusjon. Transformasjonsprosessen viser en sjeldent beskrevet link mellom materialitet i de ulike mediene som var i bruk.

Entreprenørskap i oversettelse fra en tekno-økonomisk til en utdanningskontekst

Dag Ofstad har beskrevet den oversettelsesprosessen som gjelder begrepet entreprenørskap de siste 20 årene. Begrepet har opprinnelig vært brukt i tekno-økonomisk kontekst, og har også vært brukt i politisk kontekst. Ofstad presenterer i artikkelen konturene av pedagogisk entreprenørskap som en mulighet for fornyelse i skolens læringsrom.

Skolesangrepertoaret som et verktøy for bygging av nasjonal identitet

Camilla Cederholm undersøker innholdet i tolv sanger fra sangbøker i den finlandssvenske skolen fra 1800-tallet fram til i dag. I en hermeneutisk analyse av det lyriske innholdet i sangene vises to aspekter som gjør at sangene overlever til tross for samfunnsforandringer. Disse aspektene er naturbeskrivelser og uttrykk for patriotisme.

Del 4: Akademiske konferansesjangrer: poster, symposium og paneldiskusjon

Poster som multimodal hybridform av kunnskapsdeling

Anna-Lena Østern og Alex Strømme har i artikkelen analysert karakteristiske trekk i et innovativt arbeid med poster som akademisk sjanger. Hensikten med studien er å bidra med økt kunnskap om utfordringene forskeren møter i denne hybride sjangeren med skrevet tekst, visuelle innslag og muntlig formidling.

Fra accountability til kulturell dannelse og et profesjonelt rom for lærerutdanning – en symposiepresentasjon

Anna-Lena Østern, Johanna Ray, Hannah Kaihovirta-Rosvik & Thorolf Krüger viser i denne artikkelen hvordan symposiet utgjør en romslig paraply over et valgt tema der de forskjellige stemmene kan høres i dialog med hverandre. I dette symposiet blir begrepene accountability og kulturell dannelse knyttet sammen med læreprofesjonalisme og et profesjonelt rom. Gjennom å se på lærerutdanning på en romlig måte og forstå dens topografi, utstrekning og dynamikk gjennom disse termene, er det mulig å forstå hvorfor og hvordan visse begreper får en privilegert betydning. Denne spatiale tilnærmingen gir også en mulighet til å ommøblere i rommet, for eksempel gjennom å spørre hvor begrepet accountability egentlig kommer fra og hvordan det kan få støtte.

Paneldiskusjon om lærerutdanning i spennet mellom nasjonal identitet og globale trender

Kari Smith innledet en avsluttende paneldrøfting ved NAFOLs konferanse 2012 gjennom å stille en rekke spørsmål til paneldeltagerne om hvordan lærere skal kvalifiseres og sertifiseres. Mer kompleks blir temaet når man spør etter hvilken kontekst denne kunnskap skal brukes og til hva slags samfunn utdanningen skal streve etter. Kan vi være enige om en global forståelse av den beste lærerutdanningen? I panelet var svaret nei. Det var derimot bred enighet om at lærerutdanninger og skoler er lokale. Men det er fint om de lokale rommene kan åpnes for kontakt med det som er annenhet og annerledes gjennom en inkluderende og mangfoldig pedagogikk.

Authors

Anna-Lena Østern is a professor in arts education at the Norwegian University of Science and Technology, Trondheim, Norway. She is scientific leader of the national graduate school NAFOL. Østern's research interests concern multimodal educational design, aesthetic approaches to learning, and supervision in teacher education and research.

Kari Smith is a professor in Education at the University of Bergen. She is Chair of the Board of NAFOL. Smith's research interests concern assessment and learning, cooperation between teacher education and the practice field, professional learning of teachers and teacher educators, newly qualified teachers and mentoring.

Gert Biesta is a professor of Educational Theory and Policy at the Faculty of Language and Literature, Humanities, Arts and Education at the University of Luxembourg. He is particularly interested in questions about citizenship, democracy and democratization.

Inga Bostad is the elected Pro-Rector of the University of Oslo, Norway, for the period 2009-2013, and as such, deputizes for the Rector. Inga Bostad gained her Master's Degree in Philosophy in 1989 and her doctorate in 2005 from the University of Oslo. She has been associated with the Department of Philosophy, Classics and History of Art and Ideas.

Lars Løvlie is a professor emeritus at the University of Oslo, Norway. Lars Løvlie's research and teaching is focused on basic concepts in educational thinking, related to their historical past and introduced in the contemporary context. Løvlie is member of the Humanities Studies in Pedagogy Research Group at the Faculty of Educational Research, University of Oslo.

Petter Aasen is Rector and a professor in Education at Vestfold University

College, Norway. His research interests include the role of research in policy making and educational practice, and the relation between government policy and educational reforms.

Lee Shulman is a professor emeritus at Stanford University, USA. Lee Shulman has spent his professional life advocating the importance of teaching at all levels, from kindergarten through graduate school. He is best known for his work on the knowledge base of teaching, including the construct of pedagogical content knowledge, for his efforts to promote the scholarship of teaching in higher education, and for his studies of professional education.

Stella Damaris Ngorosho, PhD, is a post doc researcher in Special Education, ADEM, Bagamoyo, Tanzania. She gained her PhD at Åbo Akademi University, Finland in 2010. Ngorosho is a research fellow at the University of Jyväskylä, Finland and works as a collaborator in the Grapho-World Project in Tanzania. Her research interests are in special education, especially reading and writing among primary school children.

Ulla Lahtinen is professor of Special Education, Emerita, at Åbo Akademi University, Finland. Her areas of interest and research are special education, inclusive education, reading and writing difficulties, physical activities for individuals with disability, and education in developing countries.

Marilyn Cochran-Smith is Cawthorne Professor of Teacher Education for Urban Schools and directs the Doctoral Program in Curriculum and Instruction at Lynch School of Education, Boston Colleges, USA.

Franziska Frost is a PhD candidate in Empirical Educational Research at the TUM School of Education (Technische Universität München), Germany. Her research interests include aptitude testing, the assessment of entry qualifications and the prediction of academic and occupational success in the field of teacher education. Her special focus lies in selective interviews.

Tina Seidel, PhD, holds the Friedl Schöller Endowed Chair of Teaching and Learning Research at the Technische Universität München (TUM), Germany. Her research interests concern the study of micro processes of classroom teaching and learning, the development of teacher professional vision, and effective conditions for teacher professional development.

Manfred Prenzel, PhD, is Dean of the TUM School of Education and holds the Susanne Klatten Endowed Chair of Educational Research at the Technische Universität München (TUM), Germany. The main topics of his research relate to issues of learning and teaching in different domains (science, mathematics, medicine, economics), especially on motivation / interest, conceptual change, and patterns of teaching and learning.

Kristin Helstad is a PhD candidate at the Department of Teacher Education and School Research, University of Oslo, Norway. She is a NATED research scholar. Her professional interests are in the areas of teacher professional development, learning and didactics and educational leadership.

Andreas Lund is a professor at the Department of Teacher Education and School Research, University of Oslo, Norway. Among his research interests are: human interactions in technology rich environments, sociocultural and activity theoretical perspectives on learning and didactics, and speech communities and communication change.

Kristin Barstad is a PhD candidate and Dean at Vestfold University College, Norway. Barstad is a NAFOL research scholar. Her research interests are educational policy and politics of the educational field.

Siv Saarukka is a PhD candidate, M.Sc. Senior Lecturer, at Åbo Akademi University, Finland. She has work experience from the field of education as teacher trainer and conductor of in-service training for aspiring principals, and from school administration as inspector for schools in the Ostrobothnia region, and superintendent for education and management.

Solveig Åsgard Bendiksen is a PhD candidate in Arts and Crafts at Nord-Trøndelag University College. She is also an artist, and she is teaching in creative multimodal processes in the fields of semiotics. She is especially concerned about the artistic potential that can arise when children and students use written artifacts to write small autonomous texts on different materials like paper, leather, glass, stone, clay, plastic, and digital screens. Bendiksen is a NAFOL research scholar.

Dag Ofstad is a PhD candidate at the University of Nordland, Centre for Practical Knowledge and Centre of Pedagogics. He is educated in the field of social pedagogy/social education, and is now working on a thesis about

humans' "entrepreneurial forming processes" in schools and society. Ofstad is a NAFOL research scholar.

Camilla Cederholm is a PhD candidate at the Faculty of Education, Åbo Akademi University in Vaasa, Finland. Research interests: music pedagogical research, music analysis, song tradition, and national school song repertoires. Her doctoral thesis in progress is a hermeneutical study of 60 traditional songs from the Swedish-speaking part of Finland, a kind of 'song treasure'.

Alex Strømme is a professor in science education at the Programme for Teacher Education at the Norwegian University of Science and Technology, Norway. He has research interests in mediation of knowledge in various ways, especially the use of ICT in both schools and higher education. He is also interested in how arts and science can be combined in the teaching and learning of science curricula.

Johanna Ray is a post doc research associate at TUM School of Education, Technische Universität in Munich, Germany. Her background includes academic studies in music psychology at the University of Uppsala and various positions within the field of music therapy in Finland and Sweden. Ray holds a teacher certificate for grades 1-6 in Swedish compulsory schools in Finland. She earned her PhD at Åbo Akademi University in 2004.

Hannah Kaihovirta-Rosvik is an A-R-T-ographer (Artist, Researcher, Teacher). She is senior lecturer in Arts Education at the Faculty of Education at Åbo Akademi University in Finland. She holds a PhD from Åbo Akademi University from 2009. Her research interest is the aspect of participating in artistic concepts and relational art in educational settings, particularly when combined with arts based multimodal learning practices.

Thorolf Krüger is a professor at the Centre of Educational Research at Bergen University College, Norway. He earned his doctorate at the University of Wisconsin, Madison, USA in 1998. Krüger's research interests concern educational institutions such as arenas for cultural formation/Bildung; teacher professionalism (various interrelations between teacher practice, teacher education and teacher education research) and musico-dramaturgical aspects of educational practice.

Appendix

Paper presentations at the NAFOL conference in May 2012

- Barstad, Kristin: Qualification Frameworks and the Concept of Knowledge: From Aristotle to Bologna, Brussels and Norway
- Bendiksen, Solveig Åsgard: Are you experienced?
- Cederholm, Camilla: School song repertoire as a means of building national identity
- Emstad, Anne Berit: School Evaluation in Norway during the Last 20 Years. Where Do We Stand, and What Are the Main Challenges?
- Frost, Franziska: Motivational, Pedagogical and Cognitive Prerequisites of Pre-service Teacher Candidates – A Systematic Analysis of Application Documents
- Helstad, Kristin: Knowledge at play: teachers' and experts' collaborative work on student writing
- Hustad, Bent Cato: How Do Principals Experience Working to Enhance Employee-presence in Their Schools?
- Lafton, Tove: Possible discursive understandings of the concept digital practice in early childhood education
- Larsen, Lea Lund: Pedagogical Approaches – Insights for Teachers of Adults
- Lindqvist, Marcia: Teachers' Expectations Regarding Possibilities and Challenges in Teaching in 1:1 Computer Classrooms
- Mårtensson, Kristina: The importance of student teachers' memories of school for their developing professional identity
- Ofstad, Dag: Entrepreneurship and innovation in translation: from a techno-economical, via a political, to a pedagogical context. What are the impacts and consequences?
- Peiser, Gillian: The influence of teachers' interests, personalities and life experiences in intercultural languages teaching
- Runestad, Anne Kristine Solberg: Between Intention and Reception – Computer based literacy tools in grade 1 at primary school

-
- Røykenes, Kari: What is the relationship between test anxiety and self-concept when students are facing a high-stakes test?
- Saarukka, Siv: Components Influencing Principals' Leadership
- Skåland, Børge: Holding your own or loss of the self: The protection and maintenance of teachers' personal and professional self when pupils violate pedagogues' reciprocal ontological security through threats, violence and harassment
- Solbue, Vibeke: In search of my hidden preconceptions as a researcher
- Utvær, Britt Karin Støen: NAFOL Vocational Students' Persistence in the Health and Social Care Track: the Importance of Life Goals, Motivation, and the Experience of Meaning
- Ørbæk, Trine: Creative Dance in Physical Education

Poster presentations

- Barstad, Kristin: Qualification frameworks and the concept of knowledge – from Aristotle to Bologna, Brussels and Norway
- Birkeland, Åsta: Will through a comparative approach explore how the ideals of individualization are understood and unfolded in preschool teachers' practice in Norway and China
- Bjordal, Ingvil: Multicultural education in a Norwegian context – approaches to “the other” or new ways of conceptualizing ourselves
- Borgen, Siv Yndestad: Cultural formation of identity of school based teacher educators within a community of practice
- Burner, Tony: Pupils' voices: Learning through assessment?
- Bøe, Marit and Hognestad, Karin: Practical knowledge and educational leadership in kindergarten.
- Eide, Kristin: Teachers' contribution to school development, what makes it possible and what restricts their work.
- Granly, Astrid: Learning to teach writing
- Faye, Reidun: Dropping out – Dropping in. What happens to pupils who drop out of primary school in Nepal?
- Fjogstad, Tonje: “Breakdance – that’s me!” Identity construction among young breakdancers.
- Flatøy, Ingunn: Abc online resources in early literacy – a valuable supplement or a waste of time?
- Hofslundsengen, Hilde: Emergent literacy in preschool
- Holten, Ingeborg S.: The concept of power in the transition between kindergarten and school
- Instefjord, Elen: Integrating technology in teacher education

- Jensen, Andreas: Reflexive teacher training – modeling a didactical analytic tool
- Jølle, Lennart: Assessment of students' writing. How expertise develops within a community of practice
- Jørgensen, Camilla S.: Applied Bildung in pupils' RE texts
- Kjelen, Halvard: A canon that captivates
- Kongsgården, Petter: ICT supported practices at school
- Kristoffersen, Cherise S.: How can writing development be affected by developing a shared terminology?
- Lafton, Tove: Digital practice – In search of an analytical space
- Langørgen, Ketil: The induction period for new academic employees in Norwegian teacher education.
- Larsen, Lea Lund: Teachers as learners. A study on teachers of adults' experiences in practice
- Leirhaug, Petter Erik: The Absence of Assessment FOR Learning in Norwegian Physical Education: Assessment Crises or Opportunity?
- Letnes, Mari Ann: Children's meaning-making process through production of multimodal texts
- Nordby, Mette: Learning in classrooms and other rooms using mobile and SMS as bridge
- Ofstad, Dag: The formation of entrepreneurial talents – a qualitative study of the importance of an active, pupil cooperative, creative, innovative and entrepreneurial learning approach in education and enculturation
- Runestad, Anne Kristine: Between Intention and Reception – Digital texts as learning resources in reading and writing learning in grade 1 at primary school
- Røkenes, Fredrik Mørk: Addressing the Second Digital Divide: The Development of Student Teachers' Digital Competence in Teacher Education
- Sitter, Nora: Creating a room for self-reflection and transformation
- Skreland, Lisbeth L.: An empirical study of the Teacher's professional work and their practice of norms and rules
- Spetalen, Halvor: How do vocational student teachers experience the task to lead relevant vocational training adapted to multi subject educational programs?
- Steele, Annfrid Rosøy: Challenges and opportunities for R&D as an integrated part of the new Teacher Education program at the University of Tromsø
- Svendsen, Bodil: Inquiries into teaching practice
- Sætre, Jon Helge: Educating general music teachers: A mixed methods study of educational content in general teacher education
- Sæverot, Ane Malene: The Educational Potential of the Image
- Tynæs, Arne Kristoffer: To grasp the (trans)formative in a complex learning medium: Performativity as analyzing tool in understanding drama as formation

Utvær, Britt Karin Støen: Health and Social Care Students' Persistence in Vocational Education

Vesterdal, Knut: Roles and functions of human rights education

Waade, Roy A.: Improvisation training in music – the art of flying a didactical Utopian dream or a not yet opened golden egg?

Wilson, Dorcy: Practice and theory in teacher education. How to learn – even more or may be less

Æsøy, Knut Ove: Professionalism and Science – Comparing the epistemic cultures for professional teachers and nurses

Ørbæk, Trine: Creative dance in physical education

Ødegård, Julie Ane: Political education in upper secondary schools

Round table abstracts

Gloria Jahn and Franziska Frost: Do Pre-Service Teachers Assess Their Pedagogical Competence Realistically?