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**Marita Kontoniemi & Olli-Pekka Salo**

## **INTRODUCTION**

As Finland has repeatedly excelled in OECD's PISA studies, educational experts around the world have become increasingly interested in the reasons behind the high scores. Many visitors observing the everyday activities of Finnish schools have been surprised to see that there doesn't seem to be anything particularly special taking place in the classrooms. So what is the true secret behind our high PISA scores? Apparently the results cannot be nailed down to just one reason. Rather, there are myriad factors that contribute to the top rankings (see e.g. Välijärvi et al. 2007). One of the central factors is the academic teacher education and university-based teacher training school system, quite rare in other parts of the world. What makes this education qualitatively effective? How are Finnish teachers educated? What characterises these teacher training schools and the teachers in them? How are theory and practice combined in the Finnish teacher education programmes? And what kind of developmental work is taking place in the schools connected to them? The articles in this book provide interested readers with perspectives on how teacher education is organised and developed at one Finnish university – the University of Jyväskylä – which essentially derives from the first Finnish teacher training college, the Jyväskylä Teacher Seminary, founded in Jyväskylä in 1863. Therefore, it can be said that Finnish teacher education is deeply rooted in Jyväskylä at Seminar Hill, where the main campus of the university lies even today, with the Department of Teacher Education located in its main building. The origins of the Jyväskylä Teacher Seminary lie in the model school founded by Uno Cygnaeus in 1866, though Cygnaeus had earlier initiated teacher education in 1863 by educating the first teachers for his model school.

The idea for this book arose from numerous visitors arriving at our school every year. We wanted to compile a book that would bring together general information about teacher education as well as research conducted by our in-service teachers. In previous years, reports on our school's developmental and experimental activity have been printed in this publication series, but this is the first publication in English. With this book we want to serve our guests and partners even better and at the same time give a concrete face to Finnish teacher education.

This book contains 15 chapters, written by 30 authors and arranged into three sections. Section A consists of articles discussing the Finnish

teacher education and teacher training system and the teaching profession itself. In Section B the focus lies on teacher education, particularly on the supervised teaching practices. Section C centres on the studies of our teachers in different subjects as well as projects implemented in our everyday practices. The sections are also in line with our core fields of study: supervised teaching practices and developing subject pedagogy as well as learning and teaching processes. Most of the authors are teachers in our school, but there are also professors and lecturers from the Department of Teacher Education and some other departments at the University of Jyväskylä and also at the University of Helsinki. This illustrates well how Finnish teacher education is a joint effort of several agents working towards a common goal: well-educated teachers. Below we summarise the main contents of the chapters in each section.

### **Section A: Towards the teaching profession – educating teachers in Jyväskylä**

*Kirsti Koski* and *Pirjo Pollari* write about how teacher training is organised in Finland. They provide an overview of the system of teacher training schools and reflect on the reasons behind the popularity of the teaching profession.

*Pekka Ruuskanen* describes the challenges and some views on the future of the University of Jyväskylä Teacher Training School. In the future the school has to improve and further examine its supervised teaching practices and put more effort into collaborative research with other departments at the University of Jyväskylä. Another big challenge is to develop the pedagogical use of information and communication technologies.

*Raimo Nevalainen* and *Eija Kimonen* analyse teachers' professional dimensions and orientations. They found in their study that the attributes of a modern professional teacher were enthusiasm, engagement, participation in continual learning and the constant upgrading of skills.

### **Section B: Research-based education and supervised teaching practices as the bases of high-quality teachership**

*Anna-Maija Poikkeus*, *Marja-Kristiina Lerkkanen* and *Helena Rasku-Puttonen* describe the findings from the First Steps study, a large-scale population-based follow-up of a little over 2,000 children from the beginning of kindergarten to the end of the 4th grade with simultaneous data gathering from the children's parents and teachers. They analyse the roles of classroom interactional quality and teaching practices in the development

of children's academic skills and motivation, and suggest that more attention be paid to children's motivation and learning strategies as early as in kindergarten.

*Helena Rasku-Puttonen, Ulla Klemola and Emma Kostainen* describe how social interaction competence is present and enhanced in the curriculum of the Department of Teacher Education at the University of Jyväskylä. They emphasise the importance of activating methods and exercises together with supporting group processes in learning social interaction skills and recommend that teachers work collaboratively and in groups to develop their courses.

*Pirjo Pollari, Olli-Pekka Salo and Jaana Toomar* offer a general presentation of subject teacher education with an emphasis on language as the major subject. They describe how the studies are put together by three different agents: the Department of Languages is in charge of subject-specific studies, the Department of Teacher Education provides a theoretical view on pedagogy and the Teacher Training School offers hands-on teaching practice.

*Kasper Mäkelä and Mikko Huhtiniemi* provide another angle on subject teacher education by presenting the only academic physical education (PE) teacher education programme in Finland, with an emphasis on the teaching practice that is closely linked to our school. It can be said that PE teacher education has gone furthest in intertwining theory with practice and, thus, offers a valuable model for developing other teacher education programmes.

*Riitta Huovila and Riitta Rautio* present their fourfold model of crafts teaching, which they have developed to facilitate the student teachers' comprehension and parsing of the curriculum. The authors have tested their model when supervising teacher students and have recognised the utility of the model, as it provides students with the tools to set reasonable learning objectives, to plan their teaching and reflect on their teaching practices and outcomes.

*Mika Antola* describes his study of developing supervised teaching practice in mathematics subject teacher education. His aim is to produce new models of supervising, feedback and evaluation in teacher training. The study will focus particularly on situational communication in mathematics teaching and mathematics teacher education.

*Heidi Moubu* presents her study of novice supervisors' experiences in supervising teaching practice. She found that the novice supervisors were optimistic and motivated. They liked the job and enjoyed the discussions with teacher students. They wanted to get more counselling for their work and training on how to give critical feedback to a student.

## **Section C: Exploring and experimenting – developing teaching practices in different subjects**

*Pirjo Tikkanen, Maija Ahtee, Erkki Pehkonen, Anu Laine, Leena Heinilä and Liisa Näveri* analyse and describe children's drawings of mathematics lessons in the third grade. This pilot study of a comparative Finland-Chile research project gives an interesting picture of how children experience mathematics lessons. Drawings help teachers to understand the children's thought processes, and understanding this helps teachers to develop their teaching in the classroom.

*Marja Hannula* writes about classroom conversations in the first and second grades. She gives examples of how to promote children's discussion abilities during the first two school years. Fairytales as well as children's everyday experiences have been good starting points for conversations.

*Tuuli Murtorinne* focuses on learning through interaction. She describes her experiments and studies of interactive teaching of mother tongue and literature in upper secondary school. She has found that strengthening conversation skills, building shared knowledge and planning and performing texts together give meaning and increase motivation to refine mother tongue skills. Murtorinne's study offers a nice parallel to the study by Rasku-Puttonen, Klemola and Kostainen (Chapter 5) concerning the importance of cooperation.

*Henna Mikkonen* and *Suvi Rimpiläinen* write about their study and experiment with teaching music history and Western classical music to the fifth grade. They developed different kinds of active and narrative teaching methods and noticed that these increased pupils' interest in the subject. Narrative methods helped the pupils to concentrate and participate in listening even if they were not interested in the style of music.

*Mari Kalaja* presents the international work of the University of Jyväskylä Teacher Training School from different perspectives, using the university's goal to increase internationalisation as the starting point.