Research-based Teacher Education: Finnish Perspective

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Introduction

- The characteristics of research-based teacher education in Finland
  - The definition of research-based TE
  - The reasons and justifications behind the research-based TE programme

- The students’ and teacher educators’ experiences of research-based teacher education

- The effects of research-based teacher education for teachers

- Challenges in developing research-based teacher education in the future

- Reflections about the TE development process in Norway
Finland

- independent since 1917, member of the European Union since 1995
- total area 338,000 km², population 5.4 million (15.7 inhabitants / km²)
- two official languages: Finnish (91%), Swedish (5.4%), Sámi (0.03%)
- Lutheran (78.3%), Orthodox (1.1%)
- immigrants: 4.8 % of population

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Orientation

The wide international interest towards Finnish schooling system

- PISA results (e.g. Reinikainen, 2012)
- The secrets of Finnish comprehensive school (Simola, 2005; Sahlberg, 2011)
- The specific characteristics of Finnish research-based teacher education (Kansanen 1993, 2007; Niemi, 2012)

Current viewpoints and teacher’s responsibilities (e.g. Toom & Husu, 2012)

- High goals and contents of national core curriculum (Vitikka et al., 2012)
- Pupils’ welfare and educational equity (Soini et al., 2010; Pyhältö et al., 2011)
- Pupils with needs of special education (Hautamäki et al., 2000; Jakku-Sihvonen, 2002)
- Multicultural issues (Paavola & Talib, 2010)

→ the relevance of Finnish (pre-service and in-service) teacher education?
Research-based teacher education at the academic university context

- In Finland, teacher education was placed to university context in 1979 (Koskenniemi, 1968; Lahdes, 1989; Kansanen, 1992)

- The degree and curriculum were designed according to academic requirements: education as major subject, minor subjects, theses (BA, MA), practice periods, general studies (Hytönen, 1982; Jakku-Sihvonen & Niemi, 2006)

- Research-based activities in university teaching and learning can include various kinds of activities (Healey, 2005; Kansanen, 2005; Elen, Lindblom-Ylänne & Clement, 2007; Goedhart, Finlayson & Lindblom-Ylänne, 2009)
  - Research-led curriculum
  - Research-oriented curriculum
  - Research-based curriculum
  - Evidence-based teaching
Different teacher education programmes
(Kansanen, 2005)

- **School based**
- **Research-based**
- **Experiential, personal**
- **Problem based, case approach**

The way of organizing activities
Pedagogical thinking
Two levels of research-based teacher education - the characteristics of twofold practice

PRACTISING TEACHING – TEACHER AS PRACTITIONER

GENERAL LEVEL
- metacognition
- reflection
- pedagogical thinking

BASIC LEVEL
- everyday thinking
- skills-based teaching
- teaching recipes, routines, tips

PRACTISING RESEARCHING – TEACHER AS ACADEMIC

- producing research expertise
- adaptation
- consuming research
- knowledge-based

Making pedagogical decisions

Inquiring one’s own work

RESEARCH-BASED TEACHER EDUCATION

(Krokkfors et al., 2006)
Research-based approach in the practice of teacher education

- Every study unit connected with research: the conceptualization of practice
- Overall competence of research methods: “All are known generally, one is known specifically.”
  - Continuous courses of research methods: quantitative methods – qualitative methods
  - Master’s thesis

- Teachers as practitioner researchers
  - *Producer* of the research: ability to conduct the research
  - *Consumer* of the research: ability to understand and use research results and information in own work

- Direct access to doctoral studies

(Kansanen, 2005; Hytönen, 1982)
Understanding of the research-based approach: four dimensions (Toom et al., 2008)

Four dimensions

I The context – Academic teacher education
- the special higher education context
- the principles of organising academic studies

II The approach – Main organising theme of teacher education
- a general view of teacher education
- a commitment
- a profile of the department
Understanding of the research-based approach (cont.)

III The content – Curriculum of teacher education
- Educational theory, methodology and methods, BA and MA theses
- The importance of methodological studies
- Consumers and producers of educational research
  ‘We are not producing researchers’.

IV The aim – Teacher’s pedagogical thinking
- To develop students’ critical thought processes
- To educate teachers who have an inquiring attitude towards their work
- To educate teacher’s with professional confidence and agency
Students’ viewpoints to research-based teacher education (Byman et al., 2009)

- Students’ appreciation of research-based TE

- Pedagogical content knowledge
- Theses (BA; MA), research seminar and research methods
- Teaching practice periods and ways of supervision
- Studies of educational theory and other studies of education

→ Student teachers appreciate the research-based approach in TE
Students’ viewpoints to research-based teacher education (Byman et al., 2009)

- Students’ experienced implementation of the research-based approach in teacher education was ranked lower than the attitudes towards the approach.
- Research-based approach in pedagogical content knowledge courses and practicums was criticized.
- Students expected more scholarly argumentation, teaching based on research results, and an atmosphere of serious academic studies, a sort of feeling of being at university.

→ There is potential and willingness among the student teachers to increase the research-based approach at the everyday level of the courses.
From the levels of research-based teacher education to pedagogically thinking teachers

GUIDING PRINCIPLE – GENERAL IDEA

CONCEPTUALISATION OF ACTION

EVERYDAY ACTION

Research-based approach

Theories models

Teaching

Planning

Evaluating

SCIENCE OF EDUCATION

THEORETICAL KNOWLEDGE BASE OF TEACHING

THEORY – PRACTICE INTERACTION

ACADEMIC EXPERTISE

PRACTICAL KNOWLEDGE

PROFESSIONAL SKILLS OF TEACHING

(Kansanen, 1993; Krokfors, 2005)
The relationship between comprehensive school and TE

TEACHER EDUCATION

CIVILIZED CITIZEN
humanity – ethical responsibility – zest for life

COMPREHENSIVE SCHOOL
curricular demands – needs for special education – multiculturalism – pedagogical challenges

FINNISH SOCIETY
diversity – economic issues – support for education
The structure of the Finnish educational system

Higher Education
- Universities
- Polytechnics

Upper Secondary Education
- General Upper Secondary
- Vocational Education

Basic Education

Pre-School Education
Steering system of basic education in Finland

Basic Education Act

General goals and time allocation (Council of State decree)

The national core curriculum of basic education (Finnish National Board of Education)

Teacher education (Universities)  
Local curriculum (Municipalities and schools)  
Educational resources (Publishers)

Teaching and education

(Vitikka et al., 2012)
The central role of the Finnish national core curriculum (Vitikka, 2004; Vitikka et al., 2012)

- **An administrative document**
  - Part of the national steering system of education
  - Part of the international co-operation and development

- **An intellectual document**
  - Defines and recreates knowledge that is culturally significant
  - Reveals current conceptions of knowledge

- **A pedagogical document**
  - A tool for teachers
  - Provides pedagogical advice and support
  - Sets guidelines for teaching and learning
Finnish teachers as makers of the many

- Broad pedagogical freedom and responsibility (e.g. Toom & Husu, 2012)
  - Academic master level teacher education
  - Autonomy as pedagogical professional
  - Pedagogical thinking and research orientation towards teacher’s work

- Pedagogical expert in classroom following the general aims and goals of teaching and education at schools
  - Equal and democratic relationship with pupils (National Core Curriculum, 2004; Harjumen, 2009)
  - Construction of the local curriculum on school level
  - Creation of supportive learning environment promoting interaction

- Interaction with community and society
Teachers’ responsible pedagogical action


- Organising classroom activities, selecting the teaching methods and materials in line with local curriculum
- Supporting each pupils’ full potentiality and caring of them pedagogically (Husu & Tirri, 2007; Husu, 2002)
- Pedagogical collaboration with colleagues and multi-professional groups

Finnish teachers’ personal characteristics and qualities

- Reflective approach towards teacher’s work (Kansanen et al., 2000; Niemi, 1998; Husu, Toom & Patrikainen, 2008)
- Realisation of one’s own strengths and professional identity as teacher (e.g. Kumpulainen, Toom & Saalasti, 2010, 2012)
- Strong commitment to teacher’s profession (Niemi, 2011)
Challenges for developing the research-based TE in the future

- We know about the structures and curricula of TE in Finland, but not so much about the learning process of student teachers during TE → need for research
  - Example: From Student Teacher to Experienced Teacher: Learning an Active Professional Agency (Academy of Finland, 2012-2016)

- We apply certain pedagogies in TE which affects on student teacher learning → we need to research on and develop it

- Changes at school → changes in TE
- The development of systematic in-service TE in Finland
Supporting the development of professional agency during TE

- The development of professional agency should be supported already during teacher education in order to guarantee its continuity in professional practice of teachers.

- Pedagogical practices of teacher education should provide
  - adequate opportunities for student teachers to actively participate and engage in pedagogical practices (Lunenberg, et al., 2005), and
  - offer an arena for student teachers to carry out active, mindful and responsible authorship during teacher education (Turnbull, 2005).

- The challenges for promoting professional agency in teacher education have been identified, but little is known empirically about its development during teacher education (Zeichner, 2005; Zeichner & Conklin, 2010; Lunenberg, et al., 2007; Toom et al., 2010).
From Student Teacher to Experienced Teacher: Learning an Active Professional Agency (Academy of Finland, 2012-2016)

- The research project focuses on teacher learning, learning of professional agency and regulators of professional agency in teacher education and in various professional contexts
- Multi-method, longitudinal study (surveys, videos, interviews)
- Participants: three teacher cohorts: first year student teachers (class teacher, subject teacher, special education), teachers in the induction phase (in the last year of studies and 2 first years at work), experienced teachers

- The benefits of research project for teacher education
  - Research results on teacher learning and its regulators in various contexts and teacher’s professional phases, especially in transfers
  - Helps in identifying various learning patterns, resources and challenges of learning and teaching
  - Research results about the impact of teacher education for student teacher learning and professional agency

- Researchers: Kirsi Pyhältö (HU), Auli Toom (HU), Janne Pietarinen (UEF) & Tiina Soini (TaU)

- Development and research project focusing on student teacher learning and reflection in practice periods of teacher education

Starting points:
- What knowledge student teachers find useful in their teaching? → action-oriented knowledge (Mena Marcos, 2011, 2012)
- What we are going to do? → video-recordings of student teachers’ lessons, lesson analyses → international video video library
- We aim to develop new pedagogies in teacher education

Participants:
- University of Tartu, Estonia: Docent Äli Leijen, Docent Margus Pedaste, Professor Edgar Krull
- University of Helsinki, Finland: Docent Auli Toom
- University of Turku, Finland: Professor Jukka Husu
- University of Salamanca, Spain: Ass. Prof. Juan Jose Mena Marcos
- University of Utrecht, The Netherlands: Prof. Paulien Meijer
The procedure of video-guided supervision during teaching practice in TE (ACTTEA 2012-2015)

VIDEO-TAPED LESSON

Classroom events

VIDEOTAPING
Done by student teacher at classroom

max 2 days

INDEPENDENT REFLECTION

Focus on teacher’s action

max 1 week

2 CRITICAL INCIDENTS:
Positive, empowering
Challenging, difficult

Classroom events chosen by the student teacher according to her/his aims for teaching practice

A) INDEPENDENT REFLECTION or
B) PEER REFLECTION

WRITTEN REFLECTION IN POFO/REPORT

At the end

What happens in this incident?
Why is this incident important and meaningful?
What is the more general meaning of this incident in a wider context?

What will you do with that you have understood?

What happens during the lesson?
What are the most important incidents (2) for you during the lesson? Why?
Teaching of practice in teacher education (Grossman, 2007)

- **Description of practice** – practice is viewed as it is (What can I see? What is under the surface? What do I interpret from practice? What can I learn?)

- **Analysis of practice** – practice is put into pieces (Which are the essential elements of practice? What do I observe and understand? What can I learn?)

- **Language of practice** – the wholeness and pieces of practice are discussed (Which concepts do I use? What are the elements of practice? What kind of structures of practice can I see? What can I learn?)

- **Evaluation of practice** – the elements and processes of practice are discussed (What is the most essential element of practice? Where should I focus in the wholeness? What can I learn? What can I apply in my own work as teacher?)
Reflections about the TE development process in Norway

- Really ambitious, systematic, thorough and well done work

- Research-based development work
  - Quantitative and qualitative empirical data from all the actors in TE
  - Site visits; specific characteristics of each institute
  - Analyses of teacher education curricula along the specific criteria
  - Comparison of the curricula, various profiles of the institutes
  - Analyses of the quality of learning environment in TE
  - Analysis and reflection on the importance of teaching practice
  - Recommendations for the changes based on the data

- How will you continue the systematic research on TE after the actual development and change process?
Reflections about the TE development process in Norway

- Recruitment of students to teacher education
  - What kind of academic entrance exam is used?
  - What are the criteria for selection?

- General “core curriculum” for teacher education
  - What are the major guidelines or organising theme of TE curriculum?
  - What are the aims, core contents, pedagogy and ways of assessment?
  - What kind of specific characteristics of institutions are possible within this framework?

- Relevance of TE to teacher’s work
  - How well does the TE serve the needs of teacher’s real work?
  - Do the teachers stay in teacher’s work? What kind of feedback do the professional teachers give?
Conclusions

- Design of the TE programme is always a part of the educational system in a certain context
  - It should serve both the immediate and future needs set for teachers and education
  - Systematic and research-based development of TE is recommended

- Continuous work and negotiations with teacher educators, researchers, students, representatives from schools, policy makers, surrounding society

- Hope for a better society and individual life
  - Education as a resource of hope (cf. Amsler, 2009; Sahlberg, 2007)
  - Brighter individual and societal futures through education
THANK YOU!

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References


References


