Teacher education system in Finland

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What is common in teacher education in high performing PISA countries?

Content of the presentation

- Finnish educational context
- Teacher education programmes
- Development of programmes
- Student admission/selection
- Quality assurance
Finnish educational context
Characteristics of Finnish Education
Halinen (2008); Jakku-Sihvonen & Niemi (2006); Laukkanen (2008)

1. Common, consistent and long-term policy
   - models for teacher and compulsory education are 40 years old

2. Educational equality (especially in comprehensive school)
   - education is free (books, meals, health care, …)
   - schools do not select their students (there are school districts)
   - well-organised special education (inclusion) and counselling

3. Devolution of decision power to the local level
   - a headmaster is a pedagogical leader (leadership)
   - local authorities (together with the teachers) plan local curriculum, allocate resources, …
   - school based and encouraging assessment

4. The culture of trust and co-operation:
   national level – district – school – families
   - no inspectors, no national exams …
   - no private tutoring or evening schools
Relation between the state and Finnish universities

- Universities are “independent” and enjoy autonomy and are free to develop
  - staff structure
  - study programmes
  - procedures for selection of student teachers.

- Universities are mainly financed from the state budget (No private universities).

- The number of new students is agreed in the negotiations between the university and the Ministry of Culture and Education.
Finnish teacher education programmes
A secondary (subject) teacher

- typically teaches at grades 7 to 12 (ages 13 to 19)
- teaches typically one major and one minor subjects (e.g. math and physics)

An elementary (primary) school teacher (a class teacher)

- teaches at grades 1 to 6 (ages 7 to 13)
- teaches typically all 13 subjects
Teacher education at the University of Helsinki: Collaboration between 6 faculties

University of Helsinki (11 faculties, 38 000 students, 7 400 staff members)

- Faculty of Behavioural Sciences
  - Dept. of Teacher Education
- Faculty of Arts
- Faculty of Science
- Faculty of Biosciences
- Faculty of Theology
- Faculty of Social Sciences

Secondary teacher education: pedagogical studies + subject studies

Primary teacher education
**Teacher Education Development Programme (2002):** The teacher education programmes should help students to acquire:

- high-level subject knowledge and pedagogical content knowledge, and knowledge about nature of knowledge, …
- academic skills, like research skills; skills needed in developing a curricula, …
- social skills, like communication skills; skill to co-operate with other teachers, …
- knowledge about school as an institute and its connections to the society (school community and partners, local contexts and stakeholders),
- moral knowledge and skills, like social and moral code of the teaching profession,
- skills needed in developing one’s own teaching and the teaching profession.
- ...

EU Commission, 2007: *Improving quality of teacher education*

- A teacher needs high quality professionalism:
  - University level education (Masters level & thesis)
  - Pedagogical training
- A profession where *Life-long-learning* capacity is needed
  - During the teacher education programme a student teacher should learn skills needed in developing one’s own teaching and the teaching profession
- The profession is based on partnership:
  - Collaboration in and between schools (multiprofessional teams)
  - School partnership with pre- and in-service teacher education
  - School society partnership
Development of teacher education programme from the research perspective

Two main perspectives on teacher knowledge:

- The structural perspective is based on different domains of teacher knowledge, such as:
  - Subject Matter Knowledge,
  - Pedagogical Content Knowledge (PCK) and
  - General Pedagogical Knowledge (GPK)
  (Shulman 1987, Carlsen, 1999 and Hashweh, 2005).

- Perspective on the origins of teacher knowledge is connected to the dilemma of ‘way of knowing’: Practical and professional knowledge of an academic person.
The main elements of all teacher education programmes (Decree of Teacher Education, 2005):

- **Academic disciplines**: Disciplines taught at schools (class teachers have a major in educational sciences and a module “Multidisciplinary Studies” (60 ECTS) which is a combination of different school subjects and their pedagogics).

- **Research studies**: Methodological studies, a BA and a MA thesis.

- **Pedagogical studies** including teaching practice (60 ECTS). Obligatory for all teachers.

- **Communication, language and ICT studies**.

- **Optional studies**: a variety of different courses.
Personal study plans since 2005

- Students are guided to develop their own personal study programmes and career plans.

- Students are tutored by tutors (university lecturers) to achieve the learning objectives.
Structure of the Master’s degree of a secondary teacher: 3 + 2 years

Teachers benefit of the research orientation while they make the school curriculum, plan, implement and evaluate teaching and learning.

Subject knowledge, knowledge about teaching and learning, science education and school practice are integrated into the students’ own personal pedagogical theory.

Teachers need strong competency in the subject (experts’ knowledge) when they guide students’ learning and problem-solving.

Bachelor’s level (180 cr) Master’s level (120 cr)

<table>
<thead>
<tr>
<th>Study credits</th>
<th>6 hours of work</th>
<th>1 study year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Major Subject</td>
<td>Minor Subject</td>
</tr>
<tr>
<td>Master-thesis</td>
<td>BSc thesis</td>
<td>Ped. thesis</td>
</tr>
<tr>
<td>Teaching practice</td>
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<tr>
<td>Pedagogical studies</td>
<td>Communication and language studies</td>
<td></td>
</tr>
</tbody>
</table>

Subject knowledge, science, teaching and learning are integrated into the students’ own personal pedagogical theory.
Structure of the master degree of a primary teacher: 3 + 2 years

- Finnish language, PCK
- Mathematics, PCK
- Physics, PCK
- Chemistry, PCK
- Biology, PCK
- Geography, PCK
- History, PCK
- Religion/ethics PCK
- Sports
- Arts
- Music
- Crafts

Bachelor’s level (180 cr)  Master’s level (120 cr)

Major Subject: Education

Multi-disciplinary studies

Minor Subject

Communication and language studies

Study credits
1 cr. = 26 hours of work (60 cr. = 1 study year)

Master-thesis

Pedagogical studies

BSc thesis
The pedagogical studies helps the students …

- to **integrate** subject knowledge, knowledge about teaching and learning and school practice into their own **personal pedagogical theory**.
- to become **aware** of the **different dimensions** of the teacher profession: social, philosophical, psychological, sociological, and historical basis of education,
- to be able to **reflect** on their own personal pedagogical “theory” (reflection for, in and on action),
- to **develop potentials** for lifelong professional development.
The structure of the pedagogical studies in secondary teacher education programme in Finland

<table>
<thead>
<tr>
<th>Pedagogical studies in Finland (60 cp.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General courses on education, teaching and learning 13 cp</td>
</tr>
<tr>
<td>- Psychology of development and learning 4 cp</td>
</tr>
<tr>
<td>- Special needs education 4 cp</td>
</tr>
<tr>
<td>- Social, historical, and philosophical basis of education 5 cp</td>
</tr>
<tr>
<td>Subject pedagogy (PCK) 17 cp</td>
</tr>
<tr>
<td>- Psychological basis of teaching and learning of a subject 5 cp</td>
</tr>
<tr>
<td>- Curriculum development and planning of teaching 5 cp</td>
</tr>
<tr>
<td>- Evaluation of teaching and learning, evaluation of a curriculum 7 cp</td>
</tr>
<tr>
<td>Educational research 10 cp</td>
</tr>
<tr>
<td>- Research methodology in education 3 cp</td>
</tr>
<tr>
<td>- Teacher as a researcher-seminar 3 cp</td>
</tr>
<tr>
<td>- Minor thesis in pedagogy 4 cp</td>
</tr>
<tr>
<td>Teaching practice 20 cp</td>
</tr>
<tr>
<td>- Supervised basic teaching practice 7 cp</td>
</tr>
<tr>
<td>- Supervised applied teaching practice 5 cp</td>
</tr>
<tr>
<td>- Supervised advanced teaching practice 8 cp</td>
</tr>
<tr>
<td>- Reflection supported by portfolio assessment work</td>
</tr>
</tbody>
</table>

In Finland huge amount of PCK is taught also at the departments of Physics, Chemistry, ...
Objectives:

- A student becomes familiar with development of an individual and group and identifies the special characteristics of the different groups.

- The student develops readiness to understand different views on the growth, development and learning of the human being and from the significance of the interaction between an individual and a group and takes the psychologic principles of the learning into consideration in the teaching.
Development of study programmes at the Department of Teacher Education, University of Helsinki
Framework for designing the teacher education programme at the University of Helsinki

Research on teacher education
- Structure of teacher knowledge
- Forms of knowledge: professional ... practical

Research on subject and teaching and learning → Content

EU and National strategies

Students’ learning outcomes and evaluations of the programme
Feedback from municipalities

Co-operative planning of the programme: Teachers from the subject departments, Department of teacher education, school teachers and the student teachers

Subject teacher education programme

Own research on teacher education

Outcomes, Collection of students’ evaluations
Student admission/selection for teacher education programmes
## Student admission (2008)

<table>
<thead>
<tr>
<th>Degree programme</th>
<th>Applications</th>
<th>Entrance examination part I</th>
<th>Entrance examination part II</th>
<th>Accepted</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class teacher education</td>
<td>1258</td>
<td>1045</td>
<td>362</td>
<td>123</td>
<td>9.8 %</td>
</tr>
<tr>
<td>Kindergarten teacher education</td>
<td>537</td>
<td>464</td>
<td>300</td>
<td>101</td>
<td>18.8 %</td>
</tr>
<tr>
<td>Early childhood master's program</td>
<td>54</td>
<td>40</td>
<td>-</td>
<td>28</td>
<td>51.9 %</td>
</tr>
<tr>
<td>Special teacher education</td>
<td>167</td>
<td>95</td>
<td>-</td>
<td>15</td>
<td>9.0 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2016</strong></td>
<td><strong>1644</strong></td>
<td><strong>662</strong></td>
<td><strong>267</strong></td>
<td><strong>13.2 %</strong></td>
</tr>
</tbody>
</table>
Two phases in admission to the teacher education programmes

1st phase
- Subject-related test/tests with one or several books/pdf-materials to read
  - primary school teacher education: test on educational sciences
  - secondary school teacher education: test on the subject
- High school diploma

2nd phase
- Interview (next slide)
- Group discussion (Primary teacher education)
- Special activity in some programmes, like educational episode in Kindergarten teacher education
Interview as a part of the student admission

- Two to three interviewers (one teacher from the teacher training school)

- The questions are asked in order to clarify:
  - How motivated the applicant is for the teacher profession (e.g. are there any other choices)
  - How eager the applicant is for studies (e.g. how well know the content of the programme)
  - How suitable the applicant is for a teacher profession (e.g. interaction skills, experiences of working with kids or young people)
Student admission for teacher education programmes: Special features

- In the kindergarten teacher education the entrance examination comprises a written exam and an aptitude test consisting of interaction with a group of children, and an interview.

- In the primary school teacher education the entrance examination comprises a written exam and a group discussion (interaction) situation, and an interview.
Quality assurance of Finnish teacher education programmes
A new era in quality management for higher education

- The focus in QA is turning internationally more and more to:
  - mastering changes,
  - allowing ownership for development
  (Wolff, 2004; Ehlers, 2009)

- Ehlers (2009) argue:
  ... “In teacher education we need methods and practices that get
  - deeper into organizations and
  - closer to the teacher educators and learners.”
Evaluation /Quality assurance is for improvements in Finnish Teacher Education

- The evaluation policy in Finland is enhancement-led
  = evaluation is a tool for improvements

- Quality Assurance in Finnish Teacher Education
  - allows freedom for different actors
  - is based on a certain level of trust
  - is based on self-assessment and monitoring
  - partners/levels take their responsibility seriously
  - continuous interaction between different partners/levels
  - students’ evaluations and staff members’ self evaluations is discussed collaboratively
Levels of Quality Assurance

- Quality Assurance (QA) has three main levels:
  - **National** audits and other national level external evaluations (based on self-assessment at institutional level)
  - **Institutional** level QA (committees, student feedback systems, feedback from the municipalities, ...)
  - **Department** and **programme** level QA processes (students’ evaluations and staff members’ self evaluations).

- Research focusing on QA issues is conducted at all levels.

- The interaction between levels through official (meetings of deans) and unofficial meetings (meetings inside the university)
Ministry of Education (ME)
- Steering
- Decision-making
- Evaluation by authorities (accountability negotiations and reports)

The Finnish Higher Evaluation Council (FINHEEC)
- National responsibility
- Audits of QA systems
- Other evaluations

Quality assurance at the Universities
Main responsibility for quality and improvement of education:
- Establishment of QA system
- Participation in external evaluations and audits of FINHEEC
- HE institutions’ own internal and external evaluation of teaching and research
- Institutional Feedback systems

Strategic planning at faculties, departments, and programmes

<table>
<thead>
<tr>
<th>TE Education</th>
<th>Math &amp; Science</th>
<th>Humanities</th>
<th>Social Sciences</th>
<th>Arts</th>
<th>Sport</th>
<th>Others…</th>
</tr>
</thead>
</table>

Curriculum development, feedback systems, staff development…

National level
University level
Faculty, department and programme level
National evaluations, research and networks for promoting QA in Teacher Education

- 1989 National committee for developing teacher education
- 1995-1998 Research project “Effectiveness of Teacher Education" as part of a large national research programme “Effectiveness of Education”. (Niemi 2002)
- 1999 Evaluation of the quality of research in the teacher education departments (University of Helsinki, 2005)
- Teacher education 2020 (Ministry of Education, 2007)
- Teacher education as part of auditing of all Finnish universities 2005-2011 (Finnish Higher Education Evaluation Council, 2011)
An example of QA at the department level (Subject teacher education programme at HU)

- Students give feedback twice a year through the evaluation questionnaires:
  - how the courses have helped the students in achieving the goals
  - quality of teaching
  - general arrangements

- Teachers of the program have evaluation and planning meetings at least twice a term

- Teacher and students are planning and evaluating courses together
An example of use of questionnaires in science teacher education programme

- $N_{2004-2005} = 51; N_{2005-2006} = 75; N_{2006-2007} = 80$
- About 80% of the students answered the questionnaires

- Several open and closed questions
  - Five-point Likert scale 
    (1 = significance small ... 5 = significance big) for evaluating the value of each courses from the viewpoint of support to construction of teacher knowledge.

- Qualitative content analysis of the answers to open questions
Student teachers’ evaluations of the course: Psychological basis related to teaching and learning a subject (10 cp.)

![Bar chart showing the evaluation results for different years.]

- **Significance of a course small for development of a teacher profession**
  - 2005: 20.0%
  - 2006: 30.0%
  - 2007: 40.0%

- **Significance big for development of a teacher profession**
  - 2005: 10.0%
  - 2006: 0.0%
  - 2007: 10.0%
Students evaluations of the program: Value for development of teacher knowledge

<table>
<thead>
<tr>
<th>Educational sciences</th>
<th>Psychology of development and learning (4 cp.)</th>
<th>06-07</th>
<th>05-06</th>
<th>04-05</th>
</tr>
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<tr>
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<tr>
<th>Pedagogy &amp; Research</th>
<th>Psychological basis related to teaching and learning science (10 cp.)</th>
<th>06-07</th>
<th>05-06</th>
<th>04-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum development and planning of teaching (7 cp.)</td>
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<tr>
<td>Research Methodology and making of pedagogical research (10 cp.)</td>
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</table>

<table>
<thead>
<tr>
<th>Teaching practice &amp; Reflection</th>
<th>Basic Teaching Practice in a Teacher Training School (7 cp.)</th>
<th>06-07</th>
<th>05-06</th>
<th>04-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Level Teaching Practice in a Teacher Training School (8 cp.)</td>
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<tr>
<td>Learning from practice through reflective thinking</td>
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</table>

Significance of a course small for development of a teacher knowledge
Significance big for development of a teacher knowledge
Student teachers’ comments on open questions

- The course introduced important topics and a versatile view to teaching of a subject.
- Both lectures and small group activities were interesting.

- In mathematics education more versatile view to evaluation/assessment is needed
- Xx course was not at all important for me.
Teaching practice and reflection

- According to the student feedback, teaching practice is evaluated very highly compared to other courses.
  - It is practical, hands-on type of work
  - High quality supervision
  - It helps the students to combine research-based knowledge and practice.

- Reflective thinking skills are essential for become reflective and autonomous professionals. However, new forms/models should be (and are already) developed.
Research orientation

- **Research seminar gets lower evaluations**: A challenge to motivate the students in their own research (producing of educational research).

- A Finnish teacher needs research orientation when he or she is developing local level curriculum or participating teachers in-service training.

- Differences between producer and consumer of the pedagogical research should be discussed more while planning the programme?
A need to develop instruction in teacher education

- Awareness of epistemological assumptions underlying the teacher education programme
  - not considering only structure of the programme and but also the origin of knowledge when designing the programme

- Supporting student teachers active role in knowledge construction through offering and combining
  - theoretical knowledge (e.g. learning psychology)
  - individual experiences/ knowledge created in practice
  - facilitating and use of appropriate tools in the process
Challenges for pedagogical studies based on students evaluations

- **Student feedback**:  
  - The structure of pedagogical studies must be easily perceived and process-oriented (fragmentation is a problem)

- **A better balance between theoretical and practical studies**

- **Practical issues**, e.g. behavioural problems, **should be discussed more** during teacher education

- **Enough time for thinking and learning**