ICT & initial teacher training – National policies
country report presentation
Material & sources

• The main sources:
  – General reports and country reports:
    • OECD & Unesco library and database
    • Insight website
  – National policies (*work plans, action plans, reforms, projects, etc.*):
    • Governments’ official website
    • Country questionnaires: Austria, Australia, Belgian Flanders, Chile, Denmark, Poland, Spain, Switzerland
  – Description of educational systems in Europe:
    • Eurybase
  – Key persons

• Information concerns 31 countries:
  – 30 OECD countries & Chile
A comparison based on 3 categories:

1. Relevant information concerning “ICT in initial teacher training” is missing
2. Developing awareness to the stakes of “ICT in initial teacher training”
3. Inclusion of “ICT in initial teacher training” at several levels:
   1. Recommendations at the national level but no obligation of training
   2. National accreditation standards for the programs and compulsory training
   3. Competence frameworks
   4. National certifications for teachers
1. Relevant information is missing

- **No relevant information was found:**
  - Canada (except Quebec)
  - Mexico
    - Despite a new decree concerning education programs
  - Slovakia
    - Training institutions have full autonomy concerning the programs

- **The findings show that no policy exists in the field:**
  - Czech republic & Greece
    - ICT training program only for in-service teacher
2. Developing awareness to the stakes of ICT in initial teacher training

1. “ICT in initial teacher training” takes part of national work plan

2. Foundations support initiatives and actions in the field
### 2.1 National work plans:

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>The AICTEC’s 2008 work plan</td>
<td><em>The improvement of educators ICT skills</em></td>
</tr>
<tr>
<td>Belgian Flanders</td>
<td>“Competence for the Knowledge society 2007-2009”</td>
<td><em>“new ICT curriculum”</em></td>
</tr>
<tr>
<td>New Zealand</td>
<td>“E-learning action plan for school 2006-2010: Enabling the 21st century learner”</td>
<td>including ICT literacy skills and pedagogies in pre-service training programs</td>
</tr>
<tr>
<td>Portugal</td>
<td>“Technological plan for education” 2008</td>
<td>3 interventions areas related to ICT &amp; teachers’ skills</td>
</tr>
<tr>
<td>Republic of Ireland</td>
<td>- “Investing strategy in ICT in school 2008-2013”</td>
<td>- Identification of a need for an overall framework</td>
</tr>
<tr>
<td></td>
<td>- “Transforming Ireland, a better quality of life for all, 2007-2013”</td>
<td>- <strong>BUT</strong> no specific action in the field of “ICT in initial teacher training”</td>
</tr>
</tbody>
</table>
## 2.2 Initiatives and actions supported by Foundations

<table>
<thead>
<tr>
<th>Country</th>
<th>Foundation</th>
<th>Types of actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>The Foundation Kennisnet ICT op school</td>
<td>Supporting the implementation of ICT in education. “More expertise together” project</td>
</tr>
<tr>
<td>Sweden</td>
<td>The Knowledge Foundation</td>
<td>Supporting the implementation of ICT in initial teacher training. Program to support the development of the student teachers’ digital competences by forming a network</td>
</tr>
</tbody>
</table>
3. Inclusion of ICT in initial teacher training at different levels

1. Recommendations at the national level but no obligation of training
2. Compulsory training and national accreditation standards for the programmes
3. Competence frameworks
4. National certification of teachers at the end of the initial training
### 3.1 Recommendations but no obligation of training

<table>
<thead>
<tr>
<th>Country</th>
<th>Content of the recommendations</th>
<th>Dates</th>
<th>Other diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>Implementation of pedagogical ICT standards in initial teacher training</td>
<td>unknown</td>
<td>No</td>
</tr>
<tr>
<td>Germany</td>
<td>ICT constitutes a core curriculum option</td>
<td>unknown</td>
<td>Master in “Art in media education”</td>
</tr>
<tr>
<td>Italy</td>
<td>ICT is recommended in initial teacher training but no compulsory</td>
<td>unknown</td>
<td>unknown</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Recommendations concerning initial &amp; in service teacher training in ICT use</td>
<td>2004 Conference of Cantonal Ministers of education</td>
<td>unknown</td>
</tr>
</tbody>
</table>
3.2 National accreditation standards for the program and compulsory training

• **Sixteen countries take part of this level:**
  – Austria, Belgium, Denmark, Finland, France, Hungary, Iceland, Japan, Korea, Luxembourg, Norway, Poland, Spain, Turkey, the United Kingdom, the United states.

  ➢ *Information for Japan & Turkey has to be supplemented*
Denmark

- **A specific standard:**
  - The Pedagogical ICT licence (2004)
- **Content:**
  - Compulsory training module and application during the field placement
- **International standard:**
  - The European Pedagogical ICT licence (2003)
Austria

• An obligatory basic ICT competence standard (2007)
  – Based on the Pedagogical ICT licence
• Content:
  – Compulsory training module and application during the field placement
Belgium

- **Belgian Flanders:**
  - Decree on teacher education (2006)
    - Adding ICT to new basic competencies of teachers
    - Reorganizing the curriculum by diminishing the number of subjects and increasing the time dedicated to the acquisition of ICT skills

- **French Community:**
  - Since 2000-2001: compulsory training modules

- **German speaking Community:**
  - Compulsory training module for primary school teacher students.
Finland

- Compulsory training module
- A specialization
  - “ICT for teaching”
France

• The “ICT training and support” program
  – Promotion of an ICT certificate in teacher training institution: C2i “level 2” or “teaching practices” (2004)
  – The C2i “Level 1” is required to enter to IUFM

• Content:
  – Majority of the competences of the framework are based on the practices developed in schools and pedagogical teams.
Hungary

- ICT is included in initial teacher training as a subject called “Computer sciences”

Iceland

- ICT subjects are compulsory
Japan

- **The Education and Certification Law (1990)**
  - The compulsory *educational Methodology and technology* course
    - Develop the pre-service teachers’ ICT skills.
- **Bachelor course (Faculties of education):**
  - “Educational Media” course
Luxembourg

- ICT is compulsory and implemented through 3 components:
  - Compulsory training module (1st & 2d year)
  - Specialization (2d year with study report)
  - Application during the field placement
Norway:

- ICT is part of initial teacher training
- Curricula for teacher education are set by local institutions
  - on the basis of the national framework
Poland

• Initial teacher training has to contained ICT training (September 2004):
  – Technological knowledge and application in the process of teaching

• The curriculum for each level of teacher education should include ICT courses (December 2004):
  – For the European computer Driving Licence
Spain

- 2 systems are co-existing (adaptation to the European Higher Education Area)
  - In both of them ICT take part of the curriculum:
    - Compulsory training module
    - Possible specialization
    - Application during the field placement
Turkey:

- Revision of the teacher training curriculum in 1998:
  - Courses about ICT and their uses are provided according to 2 topics:
    - “computer”
    - “instructional technologies and material development”.

The United Kingdom

- “Professional standards for qualified teacher status” (2007)
- “Initial teacher training national curriculum in the use of ICT in subject training” (1998 – England and Wales)
  - All trainee teachers were required to pass a test in ICT literacy before registration
- Northern Ireland
  - Competence in the use of ICT in classroom has to be demonstrated by student teachers during their field placements
The United States

- States require their own teacher education program approval process.
- The National Council for accreditation of teacher Education:
  - has technology requirements
  - approves the International Technology in Education standards
3.3 Competence frameworks

- Five countries have implemented competence framework:
  - Quebec (Canada), Chile, France, Norway & the United Kingdom
Quebec (Canada)

- “Teacher training: orientations; professional competences” (MEQ – 2001)
  - 12 competences for student teachers
    - “Integrate ICT in order to prepare, to control teaching-learning activities, and administrate teaching and professional development”
    - 6 components
  - Transition from computer science teaching *per se* to a transversal integration of ICT.
Chile

- "ICT standards for the initial teacher training" (Ministry of education of Chile – 2006)
  - Based on standards proposed by the governmental institution ENLACES
    - Instrumental, pedagogical, ethical and legal aspects and questions of professional development

- "ICT competence framework for the teacher training and profession" (Ministry of education & ENLACES – 2007)
  - Pedagogical, technical, ethical, legal, managerial, and professional development dimensions
    - Aims to support the creation and the implementation of an ICT curriculum in initial teacher training
France

• Competence framework C2I level 2 “teaching practices” (2004)
  – ICT have to be used in order to:
    • Control the professional and digital environment
    • Acquire competences required for long life learning
    • Assume professional responsibility in the educational system
    • Work across the net by using collaborative tools
    • Create and prepare teaching contents and learning situations
    • Implement the pedagogy, teach
    • Implement evaluation methodologies.
The United Kingdom

- The “Professional standards for qualified teacher status” (2007)
  - Counts 33 competences.
  - 4 of the 33 competences relate to ICT:
    - Have passed the professional skills test numeracy, literacy and ICT;
    - Know how to use skills in literacy, numeracy and ICT to support their teaching and wider professional activities;
    - Design opportunities for learners to develop their literacy, numeracy and ICT skills;
    - Teach lessons and sequences of lessons across the age and ability range for which they are trained and in which they use a range of teaching strategies and resources, including e-learning, taking practical account of diversity and promoting equality and inclusion.
3.4 National Certification for teachers

- Three countries deliver a national certification to teachers:
  - Denmark, France, the United Kingdom.
To go further

• Despite the difficulty to compare policies due to the difference of the level of information found, points of comparison can be proposed:
  – The 3 categories and sub levels
  – In each table, the coherence of the measures proposed can be highlighted:
    • Precision and coherence of the curricula and contents proposed in initial teacher training
    • Coherence of the national policy through the implementation of the levels 2-3-4 –see. Table 2)
  – The case studies can underline if these national policies are effectively implemented and with what results
• We may learn information by comparing the level of introduction of ICT in schools/ use of ICT in school with the dates of the beginning of the implementation of national policies
3.2 National accreditation standards for the program and compulsory training (1/3)

<table>
<thead>
<tr>
<th>Country</th>
<th>Program &amp; standards</th>
<th>Date</th>
<th>Compulsory training module</th>
<th>Possible specialization</th>
<th>Application during the field placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>EPIC licence</td>
<td>2007</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Belgium</td>
<td></td>
<td>2000</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>EPIC licence</td>
<td>2004</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
<td>X</td>
<td>“ICT for teaching”</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td><em>ICT training and support program &amp; C2i/C2ilevel2</em></td>
<td>2004</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td></td>
<td>“Computer sciences” subject</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3.2 National accreditation standards for the program and compulsory training (2/3)

<table>
<thead>
<tr>
<th>Country</th>
<th>Program &amp; standards</th>
<th>Date</th>
<th>Compulsory training module</th>
<th>Possible specialization</th>
<th>Application during the field placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td>1990?</td>
<td>“educational media”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td><em>ICT skills standards for teacher</em></td>
<td>2002-2003</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Norway</td>
<td><em>Strategy for competence development + competence framework</em></td>
<td>2004</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2 National accreditation standards for the program and compulsory training (3/3)

<table>
<thead>
<tr>
<th>Country</th>
<th>Program &amp; standards</th>
<th>Date</th>
<th>Compulsory training module</th>
<th>Possible specialization</th>
<th>Application during the field placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>The European Computer Driving Licence</td>
<td>2004-2007</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>Co-existence of two systems</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td>1998?</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>The professional standards for qualified teacher status</td>
<td>2007</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>United States</td>
<td>-The NCATE’s standards</td>
<td>-2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-the “ISTE” standards</td>
<td>-1991</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Thank you for your attention

Caroline.rizza@telecom-paristech.fr