



Country Report of Finland

23rd March 2012



Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

Educational and vocational training system in Finland

The primary education in Finland has been valued positively by many countries. One reason for that is that Finnish pupils have always succeeded very well in the international PISA study.

Studying in every level (basic, secondary and upper educational levels) is free of charge for students. The studying materials are already free of charge in the basic education and the current government is planning the same for the secondary education too.

A visual description of the Finnish school system with vocational education and training can be found in next page.

There are two main ways to reach the vocational qualification in Finland.

One way is to study in a curriculum based vocational school. The duration of these studies is three years contains 120 credits. If the student has earlier executed the Matriculation Examination, studies contain 80 credits and last about two years. This curriculum based study includes at least 2 credits on-the-job learning.

Second way to reach the qualification is to join an apprenticeship in a working place. During this learning period (2-3 years) the student studies 10 – 30 % in a vocational school and the rest of the time in the working place. This is competence-based qualification.

Students of all ages can join these studies. Adults with work experience but without qualification can graduate by doing the competence-based qualification. 95 % of candidates attend some training, in which they are provided with individual learning programs before the competence tests. In 2007 nearly 64000 people participated in the competence tests and some 32000 obtained their vocational qualification.

Vocational education has a stable status and importance in Finnish educational system. Approximately 50 % of the youth chooses the vocational path after finishing the basic education. Other 50 % continues into the academic path and chooses General Upper Secondary Schools. Some of these students start vocational studies after the Matriculation Examination.

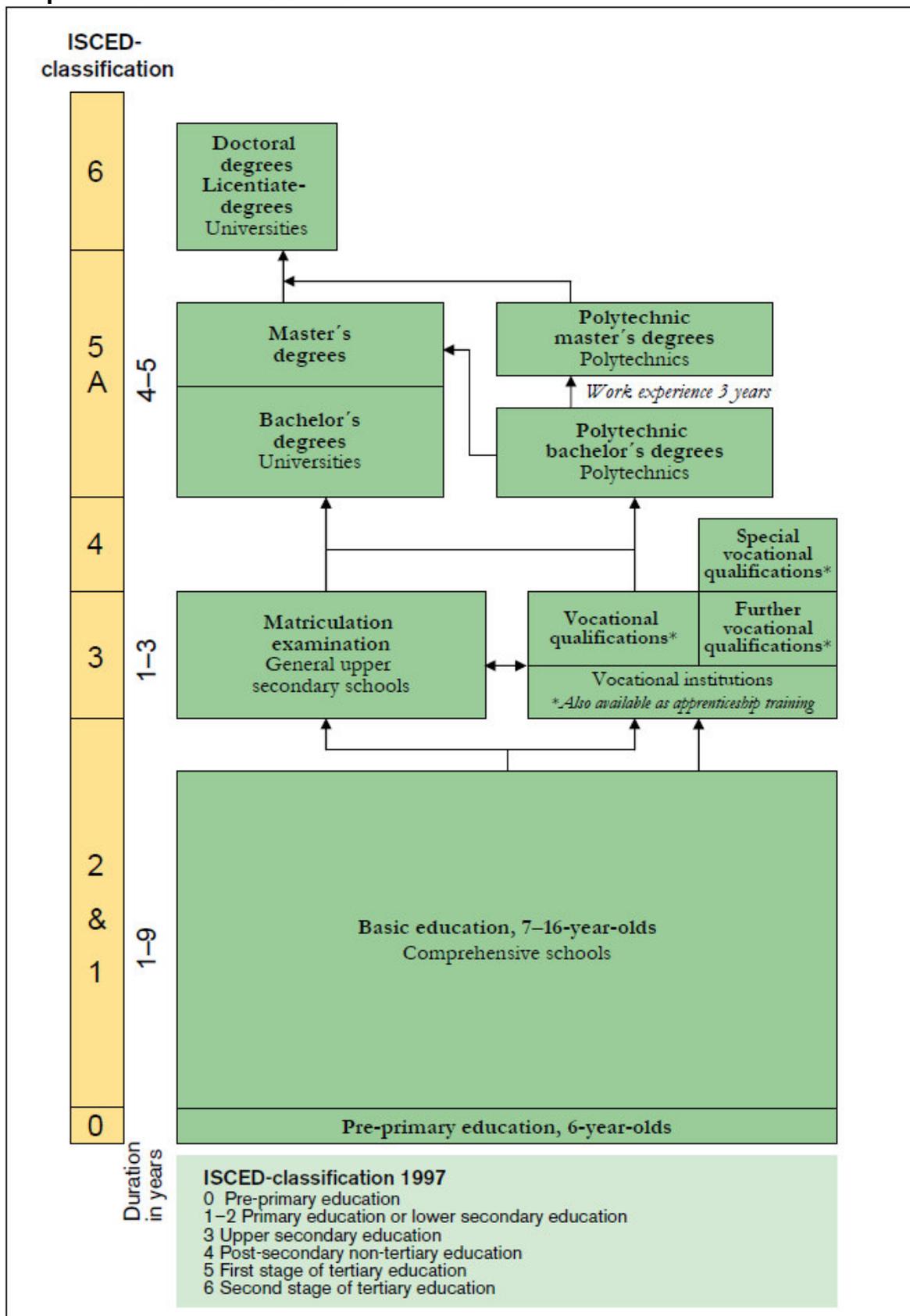
It is not obligatory to go to a vocational school, but the basic education at public comprehensive schools is obligatory for all. According to Finland's present government every pupil closing the basic education at comprehensive school has a guaranteed studying place at upper secondary education level. It is not obligatory to study, but if the will to study exists, a studying place should be available.

Finland's present government's programme says that one target is to raise the Finns to be the most competent in the world. The same programme includes also the goal that the ICT will be used in more efficient way in the Finnish educational system.

Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

Graph 1: FORMAL EDUCATION IN FINLAND



Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

Situation and needs with regard to e-Learning in vocational schools and institutions of vocational education and training

The importance of efficient ICT has been noticed officially by Finnish government since 1995. During that year the authorities created the first official ICT Strategy for Finland and soon after that the educational sector made a similar strategy for itself too.

From this strategy was started a programme named Suomi tietotyhteiskunnaksi (Finland to Knowledge Society). This programme focused on enabling the basic ICT Infrastructure for schools and educational institutions and second target of it was to bring teacher's and trainer's ICT skills to the basic level.

Table1: Amount of the computers available for pupils in the basic education

Year	Number of Institutions	Students per Learning Computer
1995	-	lower basic school: 38, upper basic school: 19
1996	-	lower: 19, upper: 13
1997	-	lower: 15, upper: 13
1998	-	13
1999	-	12
2000	3743	11
2001	3696	10
2002	3640	9
2003	3587	9
2004	3513	8
2005	3384	8
2006	3217	7
2007	-	-
2008	3026	6
2009	2927	6
2010	2823	5,5

The development in the vocational sector has been very similar but the amount of the computers available for students has always been larger.

As the second strategy was created during the year 2000 a very important role was given for developing the online learning in Finland. This was done without forgetting the earlier strategies targets. Remarkable is the fact that the Strategy 2000-2004 forced all schools and institutions to create their own strategies for the use of ICT in teaching and training. A study from year 2004 tells that approx. 92 % of the schools that joined the study had already created their own strategy and approx. 6 % had started the strategy process. Approx. 3 % had no strategy. Most of the schools in the latter group were basic schools.

In general the basic ICT infrastructure of the schools is on a good level, but there is lot to be improved in the efficiency and versatility of the e-teaching using skills.

Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

The Finnish National Board of Education, which is one of the biggest financers of the national educational projects, steers development to the needed direction by selecting the projects to be financed. During 2010 development objects for the selected projects were:

Social Media

- roles of the social media tools in the processes of teaching and learning
- practical usage of social media tools in different kind of teaching situations
- support of the collective learning by using the social media tools
- evaluation of the collective learning

Serious Gaming and Virtual Environments

- possibilities of games and game like working environments in teaching
- possibilities of virtual environments like Second Life and Real Xtend in teaching

Distance Learning

- shared teaching between different schools and institutions
- blended learning
- digital learning material for distance learning

Hardware and software in teaching

- mobile devices
- learning environments
- smart boards
- audio visual hardware and software

Possibility to do at least parts of the theory of an apprenticeship online

In addition to the good ICT infrastructure of the schools and institutions also the home users have relative good possibilities to get connected to Internet by high speed connections. At the end of the year 2010 there were 3.2 million broadband connections for 5.5 million people. 1.6 million of them were mobile broadband connections. During 2010 the number of sold connections was growing 29 %. At the same time the speed of 56 % of connections was more than 2 Mbps.

It has been possible already for many years to do all studies online in the general upper school and also lots of studies in the universities by Finnish Virtual University, which is a collaboration of Finnish universities.

The vocational sector is currently in the middle of strong development process and today all theoretical parts of some qualifications can already be done online. In addition to these national projects nearly all vocational institutes have produced also their own e-learning materials and courses.

Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

Barriers and obstacles which constrains an increased use of E-learning in vocational education and training, especially in vocational schools

There seems to be no barriers or obstacles. Instead of that the official opinion is promoting the usage and development of new efficient ways to teach and learn. Here are some quotes of The Finnish National Board of Education's "Strategic objectives for education and training 2020":

"Vocational education and training

- Strengthening work-based learning
- Raising completion rates and post-qualification employment
- Promoting innovation, regional development and entrepreneurship
- Ensuring competence as part of quality strategies
- Responding and anticipating to changes in the world of work and the labour market more rapidly and flexibly
- Developing forms of adult training that promote well-being at work
- Enhancing partnerships between adult training, students and workplaces
- Upgrading and updating competences during careers

Vocational education and training provides students with the knowledge and skills necessary to acquire vocational skills and with the potential for self-employment. Adult education and training raises the level of wide-based learning and vocational competence among the adult population. Programmes provide students with capabilities for selfemployment, develop the world of work, promote employment and support lifelong learning."

Development prospects for education and training:

Goal: Strengthening teaching personnel's competence

Increasing national intellectual capital calls for strengthening of competence among teachers and leaders in education. Co-operation and partnerships will be increased between teacher education and the rest of the scientific community. New educational technologies and learning environments will be put to active use in initial and continuing teacher education.

Goal: Building national intellectual capital

The goals and objectives of education and training highlight the skills required by citizens and the relevant knowledge base. Everyone will be guaranteed a flexible and encouraging learning pathway and opportunities for lifelong learning.

Goal: Reinforcing educational equality and equity

Everyone will have the opportunity to develop in line with their abilities, to build their future and succeed in their studies, work and private lives. Provision of high-quality education

Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

and training and a comprehensive network of educational institutions will guarantee nationwide equity for citizens as learners.

Learners' different talents and strengths will be identified earlier and more effectively in order to raise the overall standard of education, support learning and foster excellence. This will enhance the effectiveness of the Finnish education system and the level of education, as well as the country's standing as a global player in the development of education.

Goal: Finland leading the development of learning culture

Finland will become the leading developer of learning culture in the world. Learning and teaching will emphasise collaborative approaches, involvement and interaction, combined with building knowledge and competence. Everyone will be guaranteed equal opportunities to process and produce information and to make efficient use of information and communications technology in support of learning.

Electronic learning materials and diverse learning environments will form a key part of learning and teaching. Determined solutions will guide development of digital infrastructures and digital skills at all levels of education.

Initiatives, programmes and measures to increase the value of E-learning in vocational education and training

Every year since 1995 The Finnish National Board has financed projects which support usage of the ICT in the educational sector. Also this year there is financing available for many topics, but especially two of them have special influence to our CET project:

Development and diversification of learning environments of vocational education

Main points

- Mobile learning based on world of work: pedagogical methods which support the use of different kind of mobile devices
- Learning solutions which take advantage of the services of the social media, video and audio files, 3D environments, serious gaming and simulations and support individual flexible learning pathways
- Development of learning environments, teaching and learning methods that support learning in authentic like work processes.

Development of the quality of the vocational adult education

Main points

- Development of the execution process of competence-based qualifications, e.g. development of solutions of individualisation for helping students to finish their studies
- Taking the advantage of ICT in adult education and in organising competence tests.

Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

Reports and measurements

Though there have been many projects going on in the e-learning sector during the last 15 years, it is difficult to find objective evaluations and measurements of the results, especially of the results during the last few years.

There can be found some studies and reports of the situation in basic schools and general upper secondary schools but no reports were found about vocational sector.

Summary

The state, business and people in Finland have all made big investments to the ICT. To get these investments into efficient use in the educational sector there is a need for competent teachers who can use the modern technologies to produce meaningful accessible and usable learning materials and courses to modern people and who can also teach online.

Country Report Finland

DC Net Works Ltd, Vesa Lehtonen and Josef Olejniczak, 2012

Sources:

Finnish National Board of Education. Vocational adult education and training.

Link: http://www.oph.fi/english/education/adult_education/vocational_adult_education.

Date 21.2.2012.

Table 1: The Finnish National Board of Education 2011. Tieto- ja viestintäteknikka opetuskäytössä, Välineet, vaikuttavuus ja hyödyt, tilannekatsaus 5/2011 (page 12).

Opetushallitus Muistiot 2011:2. ISBN 978-952-13-4742-9 (pdf). Link:

http://www.oph.fi/download/132877_Tieto- ja_viestintateknikka_opetuskaytossa.pdf. Date 22.2.2012

Ministry of Education and Culture. Government Programme. Link:

http://www.minedu.fi/OPM/Linjaukset_ja_rahoitus/hallitusohjelman_toteuttaminen/?lang=en. Date 7.2.2012.

Graph 1: the Ministry of Education and Culture. Link:

http://www.minedu.fi/export/sites/default/OPM/Koulutus/koulutusjaerjestelmae/liitteet/finnish_education.pdf. Date 8.2.2012.

Finnish Communications Regulatory Authority. FICORA market review: Consumer prices of telecommunications services continued in steady decline. Link:

http://www.ficora.fi/en/index/viestintavirasto/lehdistotiedotteet/2011/p_22.html. Date 22.12.2012.

Rautiainen, Regina & Metsämuuronen, Jari 2005. Opettajat päteviksi tietoyhteiskuntaan 1 (page 43). Finnish National Board of Education. Helsinki: Edita Prima Oy. ISBN 952-13-2623-9.

Finnish National Board of Education. Ympäristöhankkeiden kuvaukset. Link:

http://www.oph.fi/oppimisymparistohankkeet_2010. Date 21.2.2012.

Finnish National Board of Education 2011. Learning and Competence 2020 – Strategy of the Finnish National Board of Education (FNBE), Jyväskylä: Kopijyvä Oy. Information materials 2011: 68