

Policy Recommendations – Estonia



Deliverable: D3.9B



Project Agreement Number:
511578-LLP-1-2010-1-GR-KA3-KA3MP
Project funded by the European Commission

Document Title	VISCED – Policy Recommendations – Estonia
Deliverable no.	D.3.9B
Date of issue	18/12/2012
Author[s]	Jüri Lõssenko
Contact name	Jüri Lõssenko
Organisation	Estonian Information Technology Foundation
Address	Raja 4c, Tallinn, Estonia
Telephone	+372 6285816
Email	jyri@eitsa.ee
Contributors to document	Jüri Lõssenko; Barry Phillips
Quality Reviewers	Barry Phillips; Giles Pepler
Contractual date of delivery	-
Actual date of delivery	18/12/2012
Approval status	Reviewed internally and approved
Abstract	This document reviews the policy opportunities and challenges raised by virtual education for the 14-21 age range and presents policy recommendations to policymakers and leaders in Estonia. This should be considered in the context of the overall Europe Policy Recommendations Report D3.9. Separate supplementary reports will provide policy recommendations for England, Finland and Portugal.
Keyword list	Work Package; Europe; Estonia; virtual schools; virtual colleges; field research; analysis; policy; policy recommendations; curriculum; teachers; teaching support; Information Society Strategy 2013
Distribution list	EU Commission [DG3]; VISCED partners; VISCED website
Method of distribution	Email
Electronic copy filed	"VISCED files" in VISCED Dropbox
Confidentiality status	PU

History			
Version number	Date	Revised by	Revision date
0.1	30/11/2012	Jüri Lõssenko	30/11/2012
0.9	18/12/2012	Barry Phillips	18/12/2012
1.0	18/12/2012	Giles Pepler	18/12/2012

Table of Contents

1. The brief.....	3
2. Background	4
3. National policy for the information society.....	4
4. Policy recommendations for education.....	5
5. References and links.....	6

1. The brief

This is deliverable 3.9.a of work package 3. The deliverable title is: *Policy Recommendations - Final*. The work package title is: *analysis and recommendations*.

Deliverable 3.9 is summarised in the work plan as follows:

This report is the final deliverable from subtask 3.4. It again has p2 Sero as lead author, with help from p10 TIEKE and p7 EITF . The lead author person will again be Barry Phillips, formerly at the ministry (DfES) in the UK. It is based on updating the earlier deliverable (D.3.5) in the light of new input and discussion with stakeholders.

Partners discussed the format of this final report and it was decided that it would be clearest if the overarching report on Europe to the commission was presented as a single document, with separate reports for England, Estonia and Finland, the three countries specified for individual recommendations in the work plan. Following the first year of research, it was also decided to produce an additional report for Portugal, which has had input from MENON, the overall work package leader.

The four supplementary reports, of which this is one, are numbered D.3.9.A (England), D.3.9.B (Estonia), D.3.9.C (Finland) and D.3.9.D (Portugal).

2. Background

Although the computer per pupil ratio (7 computers per 100 pupils) at schools was below the European Union average a few years ago, the teachers do not consider access as a prevalent problem (Empirica 2006). The main issue cited by teachers was their lack of time (priority according to 30% of the respondents), whereas the headmasters indicated the shortage of computers (32%) and **the lack of learning resources in the Estonian language** (27%) (Tiiger Luubis, 2006).

The results from SITES (2006) show clearly that access to computers is not related to increased use of ICT by the teachers but rather to the **availability of technical and pedagogical support** and also to the backing from the headmaster.

Computers are used by 98% of Estonian teachers (Tiiger Luubis, 2006) and almost half of them (45,6%) use them for school-related assignments (preparation for classes, reporting, communication with parents and colleagues etc.). **However, only 54% use ICT in their teaching practice** (SITES 2006). In Estonia, this depends not on available technology but primarily on pedagogical skills in using ICT in teaching, the support that the teachers are getting and on cooperation with their peers. But even in those cases **computers often become substitutes for textbooks or notebooks** where the methods remain the same as in ordinary classrooms (Luik, 2009). Thus, it can be noted that in Estonia the focus should be on improving the skills and attitudes of teachers, widening the availability of quality learning resources in the local language and only then worrying about infrastructure.

3. National policy for the information society

Estonia has adopted the “Information Society Strategy 2013” which sets out the general framework, objectives and respective action fields for the broad employment of ICT in the development of knowledge-based economy and society in Estonia in 2007-2013. In addition, the strategy is mutually complementary with several other sectoral development plans, including “Knowledge-Based Estonia 2007-2013”, thus having a direct impact on policy developments in education. The strategy targets three

action fields: a) development of citizen-centred and inclusive society, b) development of knowledge-based economy and c) development of citizen-centred, transparent and efficient public administration.

One of the outlined activities is dedicated to ICT-supported learning with the following objectives:

- to facilitate the improvement of existing and the acquisition of new skills in continuing education and retraining;
- to make traditional learning processes more flexible and individualized

4. Policy recommendations for education

The following policy recommendations are directly based on the issues and strategy input described above.

- Centralising the coordination of all activities and developments related to ICT in education within one national body.

It is imperative to identify and assign a responsible institution that would coordinate procurements of large information systems, ICT solutions and software for schools and would initiate sustainable ICT in education projects in school education in cooperation with vocational and higher education. Capacity of schools in acquiring and implementing ICT-based solutions and environments is limited and/or diverse, thus making it reasonable to coordinate and consult the development of standardised large-scale systems in a centralised manner.

- Creating mechanisms to allow for more freedom at school level to implement innovative reforms

Openness of organisations to innovation stems from the leader. Therefore it is necessary to place more effort in motivating the heads of schools in initiating the changes, adapting new technologies in the learning process and reward the positive steps in school culture that facilitate and motivate the interest in learning, cooperation and creativity. In addition, it is essential to give more credit to the role of the heads of school and to attract visionaries from diverse backgrounds to this position.

- Implementing coordination and support measures for learning resource development

One of the critical success factors is the ability to develop and implement a systematic framework for creating, storing and using interactive learning resources. Available offline learning materials could serve as basis for a repository of learning resources that can be adapted into e-textbooks and e-workbooks. Creating and integrating new learning resources must receive sufficient financial support through the teachers' innovation fund.

- Initiation of an innovation fund for teachers to support the development of new and innovative learning resources and providing means for testing new technologies and methods
- Providing teachers with sufficient ICT skills during initial training and also within continuing education programmes and improving both technical and pedagogical support structures.

Development of interactive learning resources must progress simultaneously with teacher training, thus requiring changes to existing teacher training programmes both in initial and continuing education. Initial education provides skills and readiness to use ICT in the teaching process. However, in addition to continuing training, teachers in Estonia generally require assistance from educational technologists. Also the roles of ICT-savvy learners in contributing to creation of innovative learning environments are still underestimated. Furthermore, attention needs to be paid to modern teaching methods and cooperation between different subject areas.

5. References and links

- Empirica (2006). *Benchmarking Access and Use of ICT in European Schools 2006: Final Report from HeadTeacher and Classroom Teacher Surveys in 27 European Countries*. European Commission. http://www.empirica.biz/publikationen/documents/No08-2006_learnInd.pdf
- Luik, P., Tõnisson, E., Kukemelk, H. (2009). *Sülearvuti õpilastele. Tiigrihüppe Sihtasutuse uurimuse lõppraport*. <http://panther.tiigrihype.ee/sylearvuti/sylearvutiuuring.pdf>
- SITES. Second Information Technology in Education Study (2006). *Pedagogy and ICT use in schools around the world: Findings from the SITES 2006 Study*. <http://www.sites2006.net/exponent/index.php?section=1>
- Tiiger Luubis. Toots, A., Plakk, M., Idnurm, T. (2006). *Infotehnoloogia Eesti koolides*.

- Estonian Information Society Strategy 2013.
<http://www.riso.ee/en/system/files/Estonian%20Information%20Society%20Strategy%202013.pdf>.
- IT+Education: EST_IT@2018 report on the use of IT in education (*in Estonian*).
http://www.arengufond.ee/upload/Editor/Publikatsioonid/IT+Haridus+teekaart_est.pdf