

Schoolnet Report - LATVIA

What is a Schoolnet?

There is no single or general definition of schoolnet in Latvia. Definitions may vary, when used in different contexts. Referring the ICT sector, the notion of Schoolnet includes:

- Infrastructure – computer, servers, local networks, internet connection.
At each school there is at least one special classroom, which is equipped with 6 computers connected within a local network. Each school of Latvia is provided with a connection to the internet. The capacity (speed of the data transfer) of the net is being improved.
- Virtual network among schools based upon ICT infrastructure. In Latvia there is no single centralized portal for schools. Many specialized homepages, portals providing information in some definite areas of education and homepages of educational institutions create this broad virtual network.

The core of the schoolnet is formed by the Latvian Education Informatization System (LIIS) project. On June 13th 1997, the Ministry of Education and Science of the Republic of Latvia and the University of Latvia signed the agreement "On the Latvian Education Informatization System".

The Latvian Education Informatization System (LIIS) project covers the whole information grid: educational content, management, information services, infrastructure and user training at several levels – schools, school boards and the Ministry of Education and Science – <http://www.izm.gov.lv> .

You can find information about LIIS on <http://www.liis.lv>

LIIS also coordinates actions regarding eTwinning projects. Launched in the year 2004 by the European Commission, it is a core part of the eLearning programme. eTwinning provides an opportunity to motivate young people to learn about each other, their school culture and their families while practicing their ICT skills at the same time. You can find information about eTwinning on - <http://www.etwinning.net>

Schoolnets and policy

- The schoolnet is used as a supplementary tool to help the staff of the educational system, students and parents. It provides information, teaching materials and applications, which are necessary for a successful teaching process. Schoolnets promote cooperation among schools in order to reach common aims.

- Within the LIIS framework an educational programme has been created to offer the possibility to study informatics at school. <http://informatika.liis.lv/>
- Teachers have to receive the European Computer Driving Licence (ECDL), if they want to teach informatics at school. Please refer to <http://www.ecdl.com> and <http://www.ecdl.lv>. Within the framework of the LIIS project relevant training courses and exams are organized.
- Within the LIIS framework a school management application has been developed. With the help of this application information about teachers and students has been collected, creating the so called data register. Each educational institution of Latvia provides the Ministry of Education and Science with updated information about teachers and students using a common data base. This way the Ministry is always able to operate with the most updated information about the situation in the educational institutions. Only authorized persons have access to these data.

Who are Schoolnets designed for?

Schoolnets are mainly envisaged for the staff of the educational institutions, students and their parents. However, it is also accessible to other persons.

Some resources (for example, the teachers and students register and some specialized homepages) are only accessible to a limited number of authorized users.

What do Schoolnets contain?

Teaching aid applications:

- Downloadable documents and applications
- On-line materials – for reading and interactive use

Information concerning the teaching process, projects at schools, offered training, information technologies as well as forums and discussions.

Who is involved?

The LIIS project is being coordinated by the University of Latvia. Given that the project is very work intensive, the entire educational society is involved in its implementation, as well as any other person who wants to and is able to provide assistance in the realization of the project.

Approximately 500 persons are involved in developing the LIIS products. University teachers, scientists, high school teachers, students, researchers from various scientific, business and governmental organizations, foreign colleagues, etc. are

among them. High school teachers are co-authors or authors of approximately 70 % of the products. The separate schoolnet web sites are developed and maintained by the relevant institutions themselves.

What research has been done about Schoolnets?

There are numerous, different publications about LIIS. Most of them have been collected and published at the LIIS homepage.

See <http://rex.liis.lv/liis/vesture.nsf/main!OpenView>

Schoolnets in Schools

Schoolnets encourage the possibilities offered by ICT for teaching different subjects. This possibilities concern not only informatics, but also languages, physics, chemistry, etc.

Through Schoolnets every school of Latvia has equal access to qualitative, free of charge teaching and methodological materials, applications and information. In this way the gap between urban and rural schools is covered. LIIS also pays attention to numerous ways to develop the abilities of talented students by offering advanced level exercises and supplementary materials.

Financial aspects of Schoolnets

LIIS is a public funded project. All developed materials, resulting from the LIIS project, are accessible free of charge. Each institution, which is responsible for own initiatives and which develops and maintains schoolnet web sites, is responsible for its funding source.

Examples of Schoolnets

- LIIS homepage, providing the most extensive data base of teaching materials in Latvia – <http://www.liis.lv> or <ftp://ftp.liis.lv>
- Portal about teaching informatics at schools - <http://informatika.liis.lv/>
- Homepage for teachers maintained by Microsoft. The aim is to promote cooperation among teachers, school directors, heads of education boards, as well as understanding about possibilities offered by ICT technologies to improve and develop teaching process – <http://www.skolotajs.lv>

- Educating portal developed by Fridis Sarcevic, teacher of Auce secondary school "Knowledge. Information. Technologies" - <http://www.zit.lv>
- Latvian i-society technologies exposition „LatSTE”, the aim is to promote development of the information society by sharing experiences concerning applications of the ICT at the educational process - <http://www.latste.lv/>
- e-Skola – Portal developed within the project “Riga Education Informatization System” (RIIS) - <http://www.e-skola.lv>

Use of ICT in schools

Informatics is a regular subject at schools of Latvia. When studying informatics, the student is offered knowledge about the role of informatics in modern society, the fast growth in the ICT sector and about the possibilities of applying IT when studying other subjects at school. The student can appreciate the importance and necessity of informatics at further educational process. The student can form a stable, ethic and legal basis for his further activities.

Till 2003 informatics was only taught at upper gymnasium classes. Starting in the school year 2004/2005 the subject is taught to classes 5, 6 and 7 – one hour per week. Parallel, new general, secondary, educational standards and guidelines for profile courses at informatics were developed. A transition period has been set till 2008 and a special general, educational standard has been developed for this period. Extract from „Strategy to acquire informatics in Latvia”, authors: J.Bicevskis, U.Straujums, V.Vezis (see. <http://informatika.liis.lv/getfile.aspx?sid=25>)

- **Basic education schools** – knowledge and skills to apply ICT corresponding to the demands of the modules 1, 2, 3, 4, 6 and 7. ECDL (European Computer Driving Licence) (refer to <http://www.ecdl.com> and <http://www.ecdl.lv>) is limited provided. Final exams are similar to ECDL exams, including practical exercises.
- **General secondary, special and secondary special schools** – knowledge and skills to apply ICT. There are 2 levels:
 - **Group 1** – knowledge and skills corresponding to the demands of all 7 ECDL modules; full amount; studied by students of these educational institutions; whatever their further education and specialization will be. Final exams are similar to ECDL exams, including practical exercises. The final exam may be combined with the ECDL exam.
 - **Group 2** – knowledge and skills corresponding to the demands needed at future profession or further studies at college or university: For example students of general education, mathematics and nature sciences programmes of secondary schools acquire the basis of programming. But students of special and general special schools learn for example ICT for accountants. They learn how to use special accountancy applications.

Final exams are passed by testing the student's knowledge according to examination tickets or by evaluating projects developed by students.

- **College, university** – demands for IT specialities are set by accredited programmes, standards for professions and other normative documents which are accepted during the accreditation process of the educational programme.

Each school graduate has to acquire the knowledge corresponding to the ECDL demands – basic school graduates in limited amount, graduates of other schools – in full amount. Definite, specialized applications of ICT have to be acquired at the educational institution where the relevant speciality is taught – university, college or professional educational institution.

School teachers are invited to apply ICT possibilities at different subjects. In this way they create an inter-subject link with informatics. Students and teachers apply ICT at developing and implementing different projects, at sending e-mails, at navigating in the internet and at processing information etc.

Why should we have Schoolnets?

Since the beginnings of LIIS in 1997, information about LIIS has been spread in schools. Numerous publications were released. Information was broadcasted on radio and TV in Latvia and abroad. <http://rex.liis.lv/liis/vesture.nsf/main!OpenView>
Each institution, which is according its initiative, develops and maintains schoolnet web sites is spreading information about them.

Examples of European Schoolnets for schools

<http://www.eun.org>

<http://www.europeanschoolnet.org>

References

- Homepage of the Ministry of Education and Science of Latvia - <http://www.izm.gov.lv/>
- M.Treimanis, A.Andzans, I.Medvedis, U.Straujums, The Latvian education informatization system, Baltic IT Review, No.2(9), 1998, pp.24-30.
- Latvian Education Informatization System LIIS [online] - <http://www.liis.lv>.
- Informatics at school – <http://informatika.liis.lv>