TIGER LEAP PROGRAM AS A BEGINNING OF 21-ST CENTURY EDUCATION

E. Mägi
Tiger Leap Foundation, Mustamäe tee 60, 12916, Tallinn, ESTONIA, enel@tiigrihype.ee

Modern society expects schools to be open to dialogue, to be flexible in response to changing needs, and to increase options for pupils; concerning curricula, expectations include a shift towards knowledge application and problem-solving skills, and observance of standards which prepare the school for global co-operation/competition.

TIGER LEAP PROGRAM

Tiger Leap Program was launched in February 1996 by Estonian President Lennart Meri to adjust the education system to the needs of rapidly evolving information society by equipping schools with modern information and communication technology, linking schools to internet, providing ICT education to teachers, promoting development of teaching/learning software, etc. In order to achieve these goals Tiger Leap Foundation was created in 1997 by the Ministry of Education and private sector ICT firms. As a result of the program

• All the schools in Estonia were connected to internet (90% of schools have fixed internet connection, 10% have modem connection, 98% of all the computers at schools are connected to internet)

• Computers were purchased for computer classes as well as for teachers, school administration and school libraries (20 students per computer, 7 teachers per computer, 1 headmaster per computer)

• Schools were supplied with more than 100 different educational software programs including 39 new original educational software packages in Estonian.

• Teachers’ NetGate (www.koolielu.ee) containing thousands of study materials as well as the possibility to communicate for teachers was created. Teachers’ NetGate (Koolielu) is also a member European Schoolnet network. (http://eunbrux02.eun.org/eun.org2/eun/en/About_eschoolnet/sub_area.cfm?sa=757)

• 10 900 out of 17 000 teachers have been trained on the elementary level in computer skills, 40% of all the teachers have been trained on the advanced level of computer skills.

SCHOOL OF THE INFORMATION SOCIETY

Changes in school culture, which accompany the rapid development of the information society, generate closer collaboration among teachers, greater independence in decision-making and a prolonged planning cycle (curricula, subject syllabi, learning cycles and projects). Besides traditional studies, methods enabling intensive learning, such as project-based and active learning, are gaining momentum. The role of the teacher has changed - no longer does he have a monopoly on information and his role has changed from delivering knowledge to being a mentor, adviser and supporter for pupils.

Approaches to learning are changing: as a complement to individual work, team work is valued; in setting the goals for learning and evaluating learning, more and more consideration
is given to the needs of pupils; open tasks and real-life problems are replacing abstract knowledge; authentic context, discussions, self-evaluation by pupils and ability to analyse are becoming important.

In addition to individual pieces of knowledge and algorythmic skills, integrative and complex competencies are gradually becoming essential, allowing pupils to better understand the essence of phenomena and processes and also shaping preparation to cope with new types of problem-solving in a new environment.

The learning environment is expanding, and education is moving beyond the limits of the classroom, books and schoolhouse, into the virtual environment. An important position in the development of pupils and in lifelong learning will be occupied by virtual learning communities, communities on the Internet with similar interests.

All this requires broad-minded application of ICT in school and in curricula. It is essential to carry on what Tiger Leap has started, but at higher levels of quality, taking into consideration the educational traditions and values evolved in Estonian schools.

In the year 2005, the Estonian educational system will be shaping the educational environment consciously and purposefully, helping Estonia to compete in the global information society.

TIGER LEAP PLUS PROGRAM

The objective of the TL+ development plan is implementation of ICT in order to provide premises and conditions to create a learning environment in general education schools of Estonia,

- guaranteeing the opportunity to acquire modern aptitude-compliant education,
- strengthening the links between subjects,
- making the content of education more realistic,
- making schools more open and flexible,
- updating the preparation of teachers,
- turning the information system of education into a well-functioning one.