ICT and School Development

R+D project, Hungary, Hungarian Institute for Educational Research and Development

Project leader: Marta Hunya PhD;
experts: dr. Márta Kőrös-Mikis, Nóra Tartsay-Németh, Éva Tibor

A new self-review instrument for schools has been launched by the researchers and consultants of the **Hungarian Institute of Educational Research and Development** with the aim of developing the application of information and communication technology (ICT) in schools. The project aims at making the effects of ICT investments more measurable in public education, for the schools themselves, also on national level. The system can be used for:

o   self-review in schools; it supports the use of ICT tools for school development; and
o   monitoring the application of ICT tools and digital pedagogical methods for school development.

The aim of the evaluation tool

Self-review frameworks and monitoring procedures generally rely on ICT as a supporting and orienting tool. The effect of technology on school development, on learners and learning is studied. The tools are value-oriented; that is, the aims and goals of using ICT tools and methods in education have been based on European and national educational standards. By administering the self-review, the school surveys its use of technology and is offered support for further development.

As a result of the self-review procedure, **eLEMÉR**

o   gives an overall picture to the school about how ICT is used in different fields of education;
o   provides help to the conscious and self-motivated development of the school
o   shows the ways in which ICT tools can support the development of learning, teaching and the whole school, and
o   surveys the technical resources and infrastructure necessary to achieve these goals;
o   provides the school a template to create its own digital strategy based on the self assessment;
o   supports the school to participate in a new, national qualification system, and with this motivates planned and informed school development.

The self-review framework evaluates four areas: learning, teaching, school management, and infrastructure. The four areas can be reviewed separately as well, it is not compulsory to evaluate all the areas at the same time. The recorded data can be modified any time; however, every year, 28 February, the data are stored and a new record is generated. This enables the school to compare the new results with the previous ones in case of modifications, thus observing change and development. After the self-review is finished, the data are stored in a database, which is publicly not available. Users can only check their own school's results and compare those to their previous results or to the total means of all the schools in the eLEMÉR system.

Where and how can the tools be accessed?

At the http://ikt.ofi.hu web address the following documents are accessible:

o   Self-review framework (registration with the school's Ministry ID or using the demo / demo login for the trial version);
o   The 'IKT-mozaik' and 'Iskolaportrék' books in Hungarian in .pdf formats;
o   A collection of useful links;
o   Templates for sharing documents and forum (in the future).

Please feel free to visit our website to test and use the self-review framework, the goal of which is supporting the use of ICT for school development.

If you have further questions, please send them by using the 'Question to the editors' box, or by sending an e-mail to elemer(@)ofi.hu.

The national indicator system and moniting procedure

Once a year, on eLEMÉR day, February 28th, the database is analysed using data less than 12 months old, and a statistical analysis of a national review is carried out. The review

o   presents to schools the ways in which ICT is used in the different areas of education in Hungary;
o   opens the possibility of detailed self-review and self-development;
o   provides data for educational steakholders to help informed decision making;
o   gives feedback on the effects of interventions motivating ICT use in the classrooms;
o   provides data for international comparative studies.

Some results of the 2011 national survey

The first eLEMÉR national survey was based on the results of 367 schools, out of which 259 are primary and 108 are secondary schools. The data show that the general level of using information and communication technologies for school development in schools is 2,54 (on a 4 point scale), that is most schools in the database are actually 'applying ICT'. The lowest score a school achieved is 1,17, whereas the highest score is 3,87, with only 12 schools qualifying for the 'ICT transforming school' level. Nearly half of the schools (187 schools) which participated in the survey fall into the 'ICT is emerging' category. 52 schools did not reach the 2.00 level; that is, they are still at a very basic level regarding ICT use. This result is not surprising, as the highest two levels should be considered as future goals by Hungary.
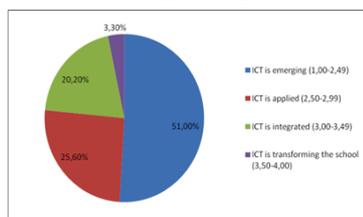
The highest levels were chosen for the statements about infrastructure (2,72). The result suggests that most schools have access to the equipment needed for the integration of ICT, but it has not happened yet. Many teachers seem to use computers during classes, but generally as a teaching tool rather than an integral learning tool; and that the level of infrastructure in
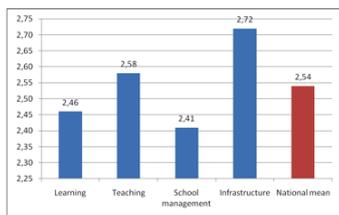
schools would make it possible to use ICT at a higher level, that is, schools are not making good use of all the resources they already have. The next area which still fits into the 'ICT is applied' category is teaching (2,58); but learning (2,46), and school management (2,41) scores are lagging behind.

The results based on the replies of 367 schools suggest the infrastructure is mostly available in schools to achieve their goals, although the equipment is not entirely exploited in the classrooms. More attention should be paid to communication inside and outside of the schools by developing the intranet and virtual learning environment. Access to school related information, documents, learning materials and communication possibilities would ease up the flow of information; and further efforts are needed to make schools ready to cooperate at national and international levels.

In the classroom, technical equipment would allow more creative and integrated us of ICT in the classroom and more cooperative work outside of school. The school management generally supports the integration of technology into the learning process; nevertheless, a more conscious approach to development (e.g. an updated ICT strategy or the introduction of virtual learning environment) would result in higher learner motivation, internal and external communication, and in 21st century learning.

For a detailed report see: http://ikt.ofi.hu