

Report on the

**ELFE 2 Regional Seminar** 

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#### Introduction

The ELFE 2 Regional seminar was opened by Mr. Getus, special advisor to the Latvian Minister of Education and Science Professor Tatjana Koke. Mr Getus expressed his gratitude for the possibility for Latvia to participate in the ELFE 2 project. Since 2008 the Ministry of Education and Science has launched several projects in the ICT area and with support from Microsoft, there are now more ICT and virtual teaching guides available in Latvia. Mr Getus expressed that the recommendations made at this seminar will be used by the Education Ministry. Finally, he thanked the involved schools and education institutes for their participation in the project and wished all the participants successful work.



The **President of LIZDA teacher trade union Astrida Harbacevica** also welcomed the participants from trade unions from the EU-12 countries to the seminar. She underlined, that the ELFE 2 project is of great significance for the work of teachers and therefore for teacher unions as it provides an opportunity to share and discuss issues linked to the use of ICT in education, especially on how ICT influences teachers work.

The **ETUCE General Secretary, Martin Rømer**, began his presentation by stressing that it is a key interest for national Teacher Unions to actively participate in the development of knowledge and in the debates about the use of ICT in education. The increasing role of ICT in society opens up for a line of risks, such as an increasing "digital divide" between citizens with and without ICT competencies or access and the social exclusion which could follow. The ETUCE has long committed itself to support and encourage its member organisations to discuss, develop and use ICT and will continue to do so. In doing so, the European teachers' voice will be heard in the discussions of what role ICT can play in their profession.

The focus on ICT has spawned massive investments in ICT in education, but according to Mr Rømer it is time to make sure that the investment in equipment is supported by the right



ICT strategies. The ETUCE is very much aware of the links between the use and state of ICT in schools, school management and finance.

Mr Rømer noted that the focus of ELFE 2 is somewhat different from the focus of first ELFE project the ETUCE has been implementing back in 2004-2005. Where ELFE 1 focused mainly on the strengths and weaknesses of ICT in education, ELFE 2 is debating where and how ICT can represent a real added value to teachers and learners. Also, the ELFE 2 project includes a focus on the role of ICT in teacher education. By examining 5 countries and linking policy to practice the ETUCE seeks to support evidence-based policymaking and provide the teacher organisations with advice and recommendations.

The Regional Seminar in Brussels included in-depth presentations of the project aim and approaches, raising-awareness on other resources on the topic, e.g. on OECD policies and studies and research publications such as the International Handbook on ICT for primary and secondary education, as well as an open floor for debates and recommendations from teacher unions. Mr. Rømer equally explained that the debates and conclusions from the seminar will contribute to updating the recommendation to the policy makers and teacher unions. A draft recommendations paper will be submitted to ETUCE Member organisations at the final project Conference, taking place in September 2009.

### 1. Aims and approach of the ELFE 2 project

Hans Laugesen, ELFE 2 Project Coordinator and representative of GL trade union from Denmark, presented the objectives and approach of the project. Mr Laugesen explained that the goals of the ETUCE work with ELFE 1 and ELFE 2 is to achieve a better understanding of the challenges and opportunities of the ICT introduction to education. Such understanding is crucial in the efforts of developing recommendations to trade unions and policy makers. The main goal of the ELFE 2 project is the identification of methodologies used to favour a use of ICT that to promote an added learning value. The project is also aimed at developing recommendations to policy-makers, to schools and teacher education institutions and to trade unions on three issues: ICT and teacher education, ICT and school management and ICT and strategic use of available financial means. As an example of the need to enhance this understanding, Mr Laugesen underlined that even though vast investments have been made in ICT in education in Denmark, a recent report showed that 4 out of 5 teachers prefer non-ICT materials.

Mr Laugesen went on to present the ELFE 2 structure, the 5 ETUCE member organisations participating in the project partnership and three researchers working on the project research phase and its final evaluation. The project targets are European teachers and their unions, headmasters, teacher education institutions (TEI), policy makers as well as



researchers in the field. Through a total of 15 school and TEI visits in 5 countries, the project seeks to gather information about practices and experiences with ICT in education.

The seminar in Brussels was the first of a series of two regional seminars gathering union representatives from the EU-15 "old" member states, while the second Seminar is to be held in Riga in March 2009 and is aimed at gathering exclusively representatives from the "new" EU member states. A final project conference will present the ELFE 2 research results and will furthermore, the participating unions will debate ICT in education-policy proposals.

In his conclusion, Mr Laugesen drew attention to the EU Commission progress report on the use of ICT to support innovation and lifelong learning for all. The report indicates that 85% of teachers in schools think that pupils are more motivated and attentive when computers and internet are used in the classroom. Mr Laugesen stressed that the use of ICT do increases learning outcomes however that this have to do with the proper training and that most of the ICT benefits have not been adopted by the majority of teachers. In some schools ICT is still used in a small part or not at all in teaching. There is a need to find a balanced way of using ICT in education stressed Mr Laugesen.

#### 2. Reading of electronic text in PISA 2009

**Dr. Karin Zimmer, Senior Analyst, Directorate for Education, OECD** began by introducing the OECD Programme for International Student Assessment (PISA). The PISA is a triennial global assessment that examines the performance of 15-years olds in key subject areas and in a wider range of educational outcomes. Furthermore contextual data is collected from students, parents, schools and other systems to explain performance variation among schools internationally. The PISA covers in between 3.500 and 50.000 15-years-old students from each country and roughly 87% of the world economy. The next data collections will be in 2009 and 2012.

The PISA works through a strong international network of expertise among the participating countries supported by a consortium of the leading research institutions (such as ACER, CITO, ETS, NIER, WESTAT) all coordinated through the OECD in collaboration with other international organisations. It is the participating countries that establish the assessment framework, develop the instruments such as cross-national and cross-cultural validity and analyse and interpret the results.

The PISA provides a cross-cultural and efficient database for work in the education field and policy targets in terms of measurable goals achieved in an international context. It equally forms the basis for a dialogue as it provides identification of educational policies and practices associated with educational success.



The PISA is used at the national level in a number of countries to set national assessment strategies and to monitor the performance within the country. It has a significant impact on the public policies in education; for example has it shifted the attention from educational inputs to outcomes in countries without this tradition.

When making international comparisons of achievements it must be decided who and what to assess. For PISA, the OECD chose to asses age-based samples selecting all 15 year-olds in schools, in order to assess what students can do with what they have learned so far and thereby to look forward rather than looking backwards.

There are <u>three broad categories of key competencies</u> that are being measured:

- Firstly, how students use "tools" (analyse, compare, contrast, evaluate...) and interact to engage in society e.g. how they use language, symbols and texts or interact with information and capitalise the potential of technologies;
- Secondly, how students act autonomously e.g. are they able to see the bigger picture, to use learning strategies, to take responsibility and to understand rights and limits;
- Thirdly, how students interact in diverse groups e.g. how they relate to others, cooperate, work in teams, manage and resolve conflicts.

The PISA assessments of key competencies focus on what skills and competences students have developed not just their cognitive skills:

- In <u>reading literacy</u> it is the use, interpretation and reflection on written material that is being assessed.
- In <u>mathematical literacy</u> it is how students recognise problems that can be solved mathematically, represents them mathematically, solves them and sets them in relation to the everyday world.
- In <u>scientific literacy</u> it is how students identify scientific questions, recognise what counts as scientific evidence and use the evidence to draw conclusions about the natural world.

In the PISA 2009, 67 countries will participate. The major focus of the PISA 2009 will again be on reading literacy. Mathematical and scientific literacy will be minor domains. The questionnaire will include options on ICT familiarity, educational career and parents' background. It will also include an assessment option on reading electronic texts. The definition of reading literacy in PISA 2009 is: how students understand, use, reflect on and engage in written texts in order to achieve goals and develop knowledge and potential to participate in society at large. The written texts may be hand-written, printed or electronic.



In relation to <u>reading of electronic texts in PISA 2009</u>, Dr. Zimmer stated that 20 countries in all will participate. The reason to include assessments in ICT skills in the PISA is that ICT is seen as an important tool to solve problems in future workplaces. Readers are not fully empowered without digital capacities and full participation in society requires electronic reading. The assessment of the ICT skills will be made as an integral part of each of the existing domains in the study. The reading literacy test will include printed written text and text in electronic form. The electronic text will be in form of a hypertext with tools and features to solve questions e.g. on the web. Dr. Zimmer emphasised that electronic reading is different as it requires that the reader constructs its own reading pathway to a greater extent than when the reading is on printed text.

PISA 2009 will thus cover the different skills a student has in order to access and retrieve information from a given text; integrate and interpret a text; reflect and evaluate on a given text e.g. its credibility which is especially important in relation to electronic text and last complex reading tasks. Dr Zimmer then demonstrated different sample tests covering each of these demands.

After the presentation there was a brief debate about what kind of observations and recommendations PISA is targeting. Dr Zimmer underlined that PISA is a way to convey ranking in education in different countries and thereby to get a collective picture of different policies that might be useful for improving education. Nevertheless, Dr Zimmer stressed that educational policies must be seen in a long term perspective. She also added that the PISA 2009 will relate students' performance to a context - the individual background, cultural interest, history etc., the school, but also to the policy levels. In relation to students ICT skills there will be self-reporting questions on how much time and for what the student uses ICT.

3. Interim report from the ELFE 2 study visits in Slovenia, Poland and Latvia: analysis of practices and experiences in schools and Teacher Education Institutions.

**Ulf Fredriksson, ELFE 2 project expert,** presented some of the interim observations of the ELFE 2 partners' visits in Slovenia, Poland and Latvia.

The schools visited were selected on a number of criteria established by the partners. While the ELFE 2 partners did not have many difficulties finding lower and upper secondary schools to visit, it was more difficult to find teacher education institutes that matched the criteria, as the pool of these was smaller. All in all the partners succeeded in finding schools and institutions that matched all criteria, though one criterion can be discussed: the



partners aimed at visiting schools that have not received special funding, but it turned out that several schools had received funding through different channels that were not usual.

Generally there was an adequate access to computers and internet at the schools, though Mr Fredriksson noted that the ICT situation at the school was very much contingent on the visions and plans of the school leaders and managers. It was also noted that the in-service ICT training of teachers was not focused on pedagogical matters. The use of ICT at the schools visited was most often done trough PowerPoint presentations, animations and as a registration-tool in lab-exercises. Also, the internet was widely used for information seeking and communication.

The ELFE 2 partners witnessed several examples of ICT used as a supplement to traditional teaching, but also examples of innovative use of ICT. Overall, there is a long way to go before teacher students receive training in a varied use of ICT. It is underlined by the observation, that though teachers rarely seemed to lack technical know-how, they often had not received the training and education necessary in order to make a qualified, pedagogical choice about how to use of ICT in their teaching. This coincides with the ELFE 2 partners' observation that the ICT infrastructure in the schools was better and more sophisticated than the ones in the teacher education institutions.

In the ELFE 1 project it was observed that schools with a record of focusing on improving and developing teaching and learning, were also the schools that had come farthest in implanting ICT strategies. In ELFE2 it has been observed that several schools lack a coherent ICT strategy, instead there has been a notion of ICT having to be implemented, one way or the other. In places like these the visions and leadership of the school management is pivotal.

Mr. Fredriksson concluded that generally the ELFE 2 partners witnessed a broad enthusiasm regarding ICT at the schools they visited in Poland, Latvia and Slovenia, though a lot could be done to upgrade the in-service ICT training and work with this in a more systematic way.

The full interim conclusions presented by the two project experts are available on the ELFE 2 project website. A final report on the research phase of the project will be presented at the final project event in September 2009.



4. Interim report from the ELFE 2 study visits in Denmark and England: analysis of practices and experiences in schools and Teacher Education institutions.

**Ela Gajek, ELFE 2 project expert,** presented the interim conclusions from the ELFE 2 partners' visits to education institutions in Denmark and United Kingdom. In each of the two countries an ELFE 2 team visited two schools and one teacher education institution.

The aim of the visits was to identify methodologies that favour a use of ICT that promotes added value, and to develop recommendations for policy-makers, teachers unions, schools and teacher education institutions on the areas of: ICT and teacher education; ICT and school management, and ICT and strategic use of available financial means.

The six education institutions visited were selected against criteria established by the project partnership: to represent examples of best use of ICT in education: good pedagogical practice, added value and/or strategic use of ICT. Furthermore, the selection of schools to visit also hinged upon the transferability of experience and practice.

The education institutions visited in Denmark were the two schools *Grantofteskolen* and *Ørestad gymnasium* and the Teacher education institutions *N. Zahle Seminarium*.

Grantofteskolen is a primary and lower secondary school. It has a policy of providing a laptop computer to each student in the lower classes and has interactive whiteboards in the classrooms. The school also has a tradition for a horizontally aligned support among the teachers, where the ICT supporters are part of the teachers' faculty. This allows for a more integrated application of ICT where students and teachers work in an environment of cooperation. The training of teachers in ICT takes place internally and externally, as well as formally and in-formally. Much of the progress done on integrating ICT in the school was exceptionally made possible when a fire razed parts of the school and thus allowed for a reconstruction with a new strategy to be implemented using the insurance help.

Ørestad Gymnasium is a new upper secondary school, with an innovative architecture. Each student has their own laptop and there are two full time technicians to provide help and support for teachers and learners. There are no rooms dedicated to ICT training, instead virtual learning environments are seen as an area equal to physical rooms and spaces. Furthermore, a policy of "innovation means mistakes" means that the teachers are not afraid of experimenting with the use of ICT, as it is acceptable to make mistakes. The school do not have a dedicated teacher's room; instead the teachers are sitting with the students. Mrs Gajek also noted that some students were requesting more face to face contact with the teachers.



N. Zahle Seminarium is the teacher training institution that the ELFE partners visited in Denmark. The school did not have the same high level of ICT infrastructure as Ørestads Gymnasium, and did struggle with a number of technical issues. The teacher education institutions can actually have ICT infrastructure inferior to the one of the schools where the student teachers will be employed. Among the examples of innovative use of ICT in the school, Mrs Gajek noted that Dartfish software was being used in physical education classes. While the institution was aware of the need for a mix of theory and practice when teaching the students about ICT, several students noted that they felt unprepared for ICT-enhanced teaching. The ELFE 2 partners also noted the issue of gender bias, as the female students outnumbered the male students by 2 to 1.

In the UK the ELFE 2 partners visited Morpeth School in London, Stepney Green Maths & Computing College in London and the Institute of education at the University of London.

Morpeth School in London is a lower secondary school with a good ICT infrastructure, due to government investments in the school. The equipment sponsored by the government was not a result of a request from the school, nor was it based on a dialogue between the government and the future users of the equipment at the school. As a result the school is very well equipped and has special ICT tools for subjects like music, photography and media and whiteboards in all classrooms. The ELFE partners were presented with several examples of how teaching methods have changed due to the introduction of new equipment. The teachers expressed a demand for more materials that would allow the students to self-study. Also, there was not the same environment of "acceptance of errors" in the use of ICT, as represented at the Ørestad gymnasium.

Stepney Green Math & Computing School is well equipped with ICT-infrastructure, though the students preferred Mac computers to the Windows computers at the school. There is an extensive use of "learning packages" as they fit the books used. These learning packages seemed to support individual learning. The students do not bring their laptops with them to school.

University of London, Institute of Education is a teacher education institution, which emphasises the mix of educational theory and practice and the inclusion of research into teaching. At the same time the school had a critical approach to the use of ICT in education, where barriers for and controversies in the use of ICT is taken into account and the use of ICT was continually questioned. Some expressed a want for clearer, internal evaluation of the use of ICT and much could be done to support and enhance the collegial exchange of practices and experiences. Also, investments often seem cyclical where a new project would be followed by a big initial investment, and then periods of small investments. The school policy was for ICT to be used only when it served a purpose.



After presenting the six education institutions, Mrs Gajek, presented some initial conclusions of the visits in Denmark and UK. Among her conclusions were, that:

- The importance of a well-structured infrastructure with a local support staff;
- Often education material in UK tended to be from commercial sources, while Danish teachers often used material made or altered by them;
- The dialogue between teachers and management on issues concerning investments in ICT seemed more pronounced in Denmark, than in UK;
- A certain amount of "culture-polarity" can be read out of the results of the visits:
  - UK seemed to rely on a more top-down-styled approach, while Denmark had a bottom-up one;
  - The Danish schools seemed to focus on constructing a shared understanding of the use of ICT among the teachers, while the UK teachers often had access to a more individual approach.

On the basis of this cultural polarity, Mrs Gajek stressed that practices and experiences are not directly transferable across countries. Instead of just copying practices, stakeholders should be inspired by one another and then develop their own practices.

Mrs Gajek ended her presentation by making a few recommendations based on her experiences of the two visits.

- Be aware of the teacher's role in the process of implementing ICT and make sure to monitor the progress of this process.
- In order to ensure creativity and innovation in the use of ICT, there must be an environment where errors and mistakes are allowed.
- Good conditions for sharing knowledge and experiences are of utmost importance.

## 5. Debate in working groups

After the presentations of the interim observations and results of the ELFE 2 study visits, the participants were divided into two smaller groups to debate the use and culture of ICT in education.

#### Working group n°1

The working group mostly discussed the first question submitted to groups on *the purpose* of using ICT in education.



In most countries, ICT is integrated to a certain extend in schools as far as equipment is concerned. However, maintaining the availability remains to be a problem. The main purpose for having ICT in schools is to create contact with the outside world. In the participant's view, all students should have ICT available as it can be an outmost contributor to students' knowledge development. When ICT is used during lessons students have to participate more actively in the teaching.

In Bulgaria, the ICT infrastructure is not developed to the full and in most schools there is not enough ICT equipment for all students. The ratio computer/student is 1/10 in average. Also several schools do not have a technician available and the main problem is the lack of supportive funding from the governmental side. In Denmark there is available ICT equipment in schools however integrating ICT use in teaching still remains to be a problem for most teachers. ICT has changed the educational work a lot and teachers need to keep themselves more up-dated and constantly vigilant about what is new and used by students.

Some participants noted that computers often are used for personal matters in the schools. Furthermore was it noted that the growing use of ICT in schools creates new problems such as cyber-bullying, without mentioning the copy/paste issues.

In Latvia students and teachers in science classes are provided software for free. Some participants noted that the development of the use of ICT in schools is crucial to meet future skills requirements. However ICT can decrease the personal contacts while a certain amount of face to face contacts is pivotal in education.

#### Working group n°2

The purpose of using ICT in education

In Poland, e-learning platforms are used in secondary schools to prepare students for the future demands in higher education. Video-conference contacts are also used by schools to be in contact with colleagues from schools around Europe – very positive experience for the school development.

Estonia has a very good ICT infrastructure which has made it possible to connect isolated islands to the mainland, not only in an educational aspect but in all spheres of life. Inspired by these good results, the Estonian government has been eager to use e-schools and has been very supportive concerning ICT and virtual teaching in schools. Teachers in e-schools have access to the whole database of the school meanwhile parents only have access to their own child's dossier and control their attendance to school. In Latvia a similar process is used, called E-classes, where remarks and notes are reported immediately on-line to parents.



In Slovenia the extensive use of ICT in schools has resulted in teachers working time increase – additional time for co-ordination and co-operation with other colleagues when teaching has been necessary.

In Cyprus, several schools are not well equipped with ICT and have poor access to the web. However, there is great motivation also from the government to introduce ICT in education all over Cyprus. The government is in the initial face of carrying out a plan to expand the use of ICT in schools aimed at, within the next 3 or 4 years, to provide one to three computers to all classrooms in all schools in order to use ICT to support teachers in their lessons or use it for student group-work.

In Malta, ICT is taught as a subject in schools to prepare student for higher education at universities and for future employment. In some schools they organise extra curricula activities, often group-activities were students publish the school newsletter on the web and edit the school homepage. ICT is also made available outside the school schedule. In every school there is ICT (computer rooms) available for free for the local community.

How national social factors or culture influence the use of ICT in education and pedagogy i.e. polish enthusiasm, British bureaucracy, Danish corporative dialogue etc...

The working group expressed doubts about the relevance of the question. Some participants stated that they were not sure if there is a cultural influence on the use of ICT in education. In general, teachers are enthusiastic about teaching and there is no difference between students from different countries and their use of ICT. It was noted that the differences are more related to the management style of the schools or to teacher's approach to ICT use in teaching.

How ICT use in education influence the culture of schools and does it generate any changes in it

Several participants expressed views that use of ICT in education does generate a lot of changes in the school environment. ICT makes it easier to get in contact with the teachers but it also increases teachers' work-load – i.e. having to respond more rapidly to e-mails. More people have access to school and class information, as everything needs to be available on the internet both good and bad test, homework, etc. It was also noted that the role of teachers is changed due to ICT. Subjects need to be rephrased more frequently and teachers need to use more creative thinking than they did before various materials and tools were available on the web.

Is external funding important for the acquisition of additional and or standard ICT equipment such as hardware and software for schools in your country - What do you think about sponsorship in public schools?



The participants in the working group agreed that funding is essential for the development of ICT in schools and that national governments do not contribute to enough, particularly for maintaining the existing equipment. It was underlined that the financial crisis could have a negative effect on school re-equipment, in Estonia for example. Another participant noted that new member states benefit of funding from the EU, but that it is necessary to know how to get the funding. It was also noted that during an economic crisis it may be necessary to find the money elsewhere e.g. from the parents, from companies, etc. In Cyprus, external funding from the private sector is welcome, but the provided software needs to be adapted to education. It was noted that public-private funding can be dangerous because public school might be more controlled by the private sector on the use of the equipment provided.

How important is school management in the development of ICT use in schools

It was generally agreed that the management is crucial for development of ICT use in schools. The management plays a central role in getting the funding, in equipping schools with ICT and in providing ICT training for teachers.

6. Computer Assisted Education and Information Technology Centre Poland. Example of a teacher education institution good Practice.

Grazyna Gregorczyk, Director of the Computer Assisted Education and Information Technology Centre in Poland presented the centre as an in-service teacher training institution specialized in computer science and ICT. The centre is a public institution, founded in 1991, and is leading in its area in Poland. It is partly funded by the government but also by participant's fees, commercial activities and by the EU.

The institution has room for more than 40 participants; it has a high level of ICT infrastructure and the key advantage of highly qualified staff. The educational personnel consist of 21 high qualified teacher consultants and three specialised IT-teachers. The teachers have wide school experiences as many of them also continue to work in schools and know the present needs.

The main activities at the Centre are focused on informatics subjects, on the professional development of teaches and on distance education. They provide pedagogical information and high specialized services for the teachers. The Centre plays an important role in the professional development of teachers' ICT knowledge in Poland and provides qualification



courses in ICT that other higher institutions cannot provide as well as a certificate demonstrating the ICT competences obtained at the Centre.

Mrs Gregorczyk provided some examples of the different courses taking place at the institution. The courses give for example introductions on how to use ICT in a school environment. In general, the main idea of the courses is to make the use of ICT in education by teachers more efficient. ICT is both seen as an information and learning medium. The computer is seen as a necessary tool to achieve a particular aim and "learning by doing" is the Centre's main approach. The Centre also supports young talented people in ICT; provides IT programs for young pupils and organises competitions in lower- and upper-secondary education.

In co-operation with the Polish Ministry of Education and other foreign institutions the Centre organises international seminars and conferences. The Centre tries to co-operate with universities in relation to newly qualified teachers in ICT, however, many issues arises universities are autonomous and sometimes it appears to be difficult to cooperate with them.

# 7. Oerestad gymnasium, Denmark example of a school good practice

Allan Kjaer, Rector of the Oerestad Gymnasium began by presenting his school. The Oerestad Gymnasium is an upper secondary school where most students continue into further learning. It is a self-governing institution meaning that it is autonomous in relation the organisation of the school. The school was constructed in 2005 having the first school leavers in 2008. The architecture of the school is particular, having only 50 individual classrooms while the rest of the school is an open space with 5 virtual rooms.

ICT is constantly present in the school. Everyone at the school, both teachers and students, have their own computer, owned by the school and rented to the pupil. Every teacher has their own lap-top and paid internet-connection at home. There are whiteboards in every class room, however these are not used all the time.

The school has 2,5 ICT supporters, 1 ICT professional and 1 pedagogical ICT-coordinator. Their presence is considered of great importance as computers need to function all the time. ICT is not used so much in the class-rooms but more in the group- and individual-areas.

#### ICT is equally used for:

Administrative responsibilities, timetables, attendance etc.



- The organisation of teaching to set goals and plans for teaching, for teaching material communication, e.g. give assignments and handing them in.
- As a teaching tool to express, produce, collect data, chat, use smart boards etc.
- Virtual teaching or e-learning still under development, but at present time there are textbooks and other visual products available. The teaching is organised in a way allowing students to work in their own tempo.

The school has not been especially funded; however, it is a new school and has therefore been able to get the newest equipment. Mr. Kjaer noted that it might be more difficult to get new equipment in the future for the school. The school mission is different from the one of many other schools - it is a school with a profile in communication, media and culture and is developed as a school laboratory for creating new teaching methods in ICT.

The use of ICT in the school is based on the pedagogical vision to develop modern knowledge qualification, competences in communication, creativity and culture. These four aspects need to be alive in every school subject. The students are seen as learners that need to be active, competent, investigating, producing, collaborating and expressing themselves. ICT is just used as a tool and a precondition for this pedagogical vision.

In relation to the organisation of the school, the use of ICT is an integrated part in the school strategy and pedagogical vision. From the start, a certain ICT standard was agreed upon on the communication and the teaching in the school. Furthermore, it was important to organise a team-based learning where it is possible to be innovative and try out new things. The overall saying at the schools is "culture of failure". The idea is that to be innovative and creative will also mean to accept failures.

Mr Kjaer underlined that there have been many challenges in initiating an ICT school and there are still many challenges to overcome. Some of the challenges he highlighted were student's ability to focus on the teaching and not on playing poker, using Facebook etc. The main answer and approach to this is to use teaching methods that makes the students active in the class. It has also been extremely time consuming to produce professional or semi-professional teaching material for the teachers. Finding the right amount of information and communication done on-line has also been a challenge - information could easily be forgotten. Therefore it has been necessary to create a culture of ethics communication. Finally, Mr Kjaer concluded that the next future challenge will be to integrate mobile-devices into teaching.

After the presentation, Mr Kjaer was questioned whether he had noticed any changes in the students' behaviour, since they are being pupils at an ICT-school. This however was difficult to answer but students are using more and more their own computer and expect that the teacher would do the same.



# 8. Plenary debate on the role of unions in relation to ICT in education conditions and pedagogical considerations

Evi Veesaar from the Estonian teacher trade union EEPU noted that her union has been rather active when it comes to promoting ITC in education. Through a project conducted by the union, teachers have been trained on how to use ICT in the classrooms. The project has improved teacher's knowledge of hard- and soft-wares. The economic growth has been high during the last couple of years in Estonia and in general schools are well equipped in terms of modern ICT facilities. There is access to internet everywhere in Estonian schools and ICT is used for communication, testing, etc. Teachers are provided with laptops for free to use them in schools and after five years they are allowed to use them at home. At first, teachers were not accustomed to the use of ICT in teaching. Making good use of ICT and organising it well was underlined as a task of school management. Mrs Veesaar finally stated that the economic financial crisis has had and will have major affects on the quality of education in Estonia also in relation to the use of ICT in schools.

Dr. Vladimír Kovár from the Slovak teacher trade union OZPSaV noted that two major projects have contributed to ICT facilities in education in his country - the T-COM and the INFOVEK. These two projects have equipped 3.500 schools with new computer classrooms, internet access and provided 1 computer for 30 pupils as a minimum. The government has been and still is very active in providing ICT use in education. Their intention is to provide 1 computer for 10 pupils in elementary schools and 1 for 5 students in secondary schools, by the end of 2011. Furthermore, ICT is to be integrated into the education curriculum. The teacher trade union has been active in the preparation of national legislation in relation to ICT use in education. The union contributed with comments and amendments during the preparation of the Education and Training Act and the Act on Pedagogical Personnel. It has equally cooperated with other organisations aimed at supporting ICT use in education, for example with the T-COM initiators on a best teacher work contest which also included work with ICT. The union has given input to a project called 'Computers for Schools' and negotiated that no schools should be left out of the ICT investments (originally Elementary Arts Schools were not included). Another union initiated project was focused on how to prepare projects for the European Social Fund (ESF); to improve ICT skills by providing training and raising legislative awareness. Finally Mr Kovár noted that if their last project submitted to the Norway Financing Mechanism receives the funding, the union wishes to train 690 trade union officials in e-learning education.

**Tanju Ungor from KTOS trade union in Cyprus** noted that Cyprus is still in a critical situation in terms of ICT in public schools. The budget for education is not used for primary schools but goes mainly to the public-private high schools or universities. The tendency for privatisation of schools is one of the reasons why ICT is not implemented in public schools in



Cyprus. The union KTOS wishes to provide in-service teacher training in ICT free of charge. Mrs Ungor concluded that ICT could be seen as the next step for developing schools in Cyprus, but it depends very much on the government willingness to provide the necessary human and financial resources for this.

It was noted that in Poland there are also problems with privatisation in the education sector, situation resulting in Government unwilling to provide money for ICT in schools. Instead, there is an extensive use of ICT cooperation with private companies such as Microsoft. The government, however, always keeps the control of the ICT equipment provided to the schools by the private companies.

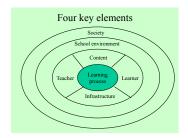
# 9. International Handbook on Information Technology in Primary and secondary Education

**Professor Margaret J. Cox** presented the International Handbook on Information Technology in Primary and Secondary Education. The Handbook is developed with contributions from all over the globe – 76 chapters made by 136 Authors from 23 different countries.

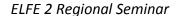
The aim of the Handbook is to provide researchers, policymakers and practitioners with an integrated overview of the field. The book focuses on several targets of IT inclusion in education such as the teacher, the curriculum, the school organisation and educational policies. Mrs Cox noted that feedback from teacher Unions would be useful as there is not much focus on this group in the handbook.

The first theme of the Handbook addresses the potential of IT to improve primary and secondary education. The second theme addresses how the implementation of IT in primary and secondary educational practice can be supported. This theme deals with the barriers and opportunities for IT implementation.

The Handbook distinguishes four key elements that affect learning processes directly: the learner, the teacher, the content, and the infrastructure. The four elements are mixed in everyday teaching in order for students to achieve knowledge (the type of knowledge depends on the mix of the elements). It was also stressed that the achievements of the students are

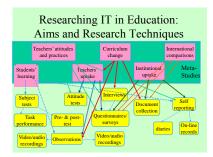


very much affected by the teacher's attitude towards IT. Mrs Cox underlined that when looking at local factors affecting IT use by education students', they might have prior knowledge on IT but they know nothing about teaching.





As far as research in ICT in education is concerned, its goals have changed notably. At first, the focus was on how to develop and evaluate educational software and what will be its impact on learning. Today, the focus is more on how teachers take up ICT in schools and classrooms covering the level of ICT resources, teachers' abilities, training and the vision of the school management.



Mrs Cox went on to present different aims and research techniques on ICT in education and the different perspectives for technology use in education. She presented the vision for the future in the Handbook and underlined that the most important approach is that governments and other policy makers take into account all the reliable research outcomes that enhances the positive

potential of ICT in education in the future.

#### Conclusion

The seminar was concluded by the ELFE 2 Project Coordinator Hans Laugesen, who thanked the participants for their active involvement and an interesting and fruitful debate. The final ELFE 2 project Conference, taking place in Bled, Slovenia, on 14-15 September 2009 will be charged of preparing the policy recommendations of the ELFE 2 project to policymakers, teachers, teacher unions and teacher education institutions.



## 10. Presentations

All presentations will be available on

www.elfe-eu.net



# 11. Agenda



## Draft Agenda

## **ELFE 2 Regional Seminar**

## European eLearning Forum for Education 2

Riga, 12-13 March 2009

## Thursday, 12 March 2009

9.30 - 10.10	Opening session:  Professor Tatjana Koke, Minister of Education and Science of the Republic of Latvia and Astrida Harbacevica, President of LIZDA teacher trade union
10:10 – 10:30	ETUCE and ICT in education  Martin Rømer, ETUCE General Secretary
10.30 - 11.10	ELFE 2 project: aims and approach  By Hans Laugesen, ELFE 1 and ELFE 2 project Coordinator
11.10 – 11.40	Coffee break
11.40 – 12.30	PISA e-reading pilot project: presentation  By Karin Zimmer, Senior Analyst, Directorate for Education,  OECD
12.30 – 14.00	Lunch
14.00 – 15.00	Interim report from the ELFE 2 study visits in Slovenia, Poland and Latvia: analysis of practices and experiences in schools and Teacher Education Institutions  *By Ulf Fredriksson, ELFE 2 project expert*
15.00 – 15.30	Interim report from the ELFE 2 study visits in Denmark and England: analysis of practices and experiences in schools and teacher Education Institutions  *By Ela Gajek, ELFE 2 project expert*
15.30 – 17.00	Debate in working groups (including the coffee break) on the national and European trends in using ICT in education

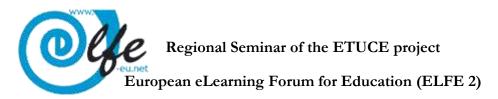


17.00 – 17.45 Working group reports

Friday, 13 March 20	009
09.00 - 09.30	Computer Assisted Education and Information Technology Centre, Poland: example of a teacher education institution good practice <i>By Grażyna Gregorczyk, Director</i>
09.30 - 10.00	Ørestad Gymnasium, Denmark: example of a school good practice <b>By, Allan Kjær Andersen, Rector of the Ørestad Gymnasium</b>
10.00 - 10.30	Coffee break
10.30 – 11.45	Plenary debate on the unions' role in relation to ICT in education: conditions and pedagogical considerations.
	Separate session for discussion among the 10 school representatives: exchange of experiences – what can be learnt from each other?
11.45 – 12.15	International Handbook on Information Technology in Primary and Secondary Education  By Margaret Cox, Professor Emerita of Information Technology in Education, Department of Education & Professional Studies, King's College, London
12.15 – 12.30	Closure of the Seminar



## 12. Participants' List



Riga, 12-13 March 2009

## Séminaire régional du projet du CSEE

### ELFE 2 - Forum eLearning européen pour l'éducation

Country	Organisation	Name	First name		
Bulgaria	SEB	TAKEVA	Janka		
Bulgaria	SEB	DAMIANOVA	Kounka		
Bulgaria	PODKREPA	DENKOVA	Margarita		
Cyprus	OELMEK	ZACHARIAS	Papazacharioy		
Cyprus	OELMEK	THEMIS	Polyviou		
Cyprus	OLTEK	PHOTIADES	Andreas		
Cyprus	KTOS	KAHRAMAN	Aysun		
Cyprus	KTOS	UMIT	Tanju		
Cyprus	POED	APOSTOLIDES	Apostolos		
Estonia	EEPU	VEESAAR	Evi		
Hungary	SEH/PSZ	SZABO	Zsuzsa		
Hungary	SEH/PSZ	VAJNA	Tünde		
Malta	MUT	WRIGHT	Karl		
Poland	SKOIW Sol	KONCZYK	Monika		
Poland	SKOIW Sol	KORNEL	Jolanta		
Poland	KSN NSZZ	KOTELKO	Maria		
Romania	Spiru Haret	PARTENE	Valeriu		
Romania	Spiru Haret	POPESCU	Radu		
Slovakia	ZPSAV NKOS	LUCKA	Maria		
Slovakia	OZPSAV	KOVAR	Vladimir		
Slovenia	ESTUS	MODRIJAN	Sandi		
Schools & Teacher Education Institutions					
Denmark	Ørestad Gymnasium	ANDERSEN	Allan		
Denmark	Grantofteskolen	DAVIDSEN	Gert		



Fridis	SARCEVICS	Auce School	Latvia
Aija	BENSONE	Auce School	Latvia
Aina	BERCE	Ogre Gymnasium	Latvia
		RPIVA - Riga Teacher Training and Education Management	
Zenta	ANSPOKA	Academy	Latvia
Radoslaw	KUBICKI	Rogowo Gymnasium	Poland
 Marcin	STANOWSKI	Tadeusz-Czacki Liceum	Poland
		Maribor Grammar	
Ivan	LORENCIC	School II	Slovenia
		Secondary school of	
Silvester	TRATAR	electrical	Slovenia
			Speakers
Karin	ZIMMER	OECD	France
		Computer Assisted Education and Information	
Grazyna	GREGORCZYK	Technology Centre	Poland
Margaret	cox	Department of Education & Professional Studies, King's College Lendon	UK
Margaret	COX	King's College, London	Steering Comn
		iittee	Steering Comm
Andrea	VEHOVEC	ESTUS	Slovenia
Dorota	OBIDNIAK	ZNP	Poland
Hans	LAUGESEN	GL	Denmark
Ilze	TRAPENCIERE	LIZDA	Latvia
Ela	GAJEK	Warsaw University	Poland
Karen	ROBINSON	NUT	UK
		Mid Sweden	
 Ulf	FREDRIKSSON	University	Sweden
Gunilla	JEDESKOG	Linköping University	Sweden
			Staff
Iva	OBRETENOVA		ETUCE
 Mille	SCHMIDT		ETUCE
Charlotte	DE KEYSTER		Interprètes
Isabelle	GALLER		Interprètes
Dorota Hans Ilze Ela Karen Ulf Gunilla Iva Martin Mille Charlotte	OBIDNIAK LAUGESEN TRAPENCIERE GAJEK ROBINSON FREDRIKSSON JEDESKOG  OBRETENOVA ROMER SCHMIDT DE KEYSTER	ZNP GL LIZDA Warsaw University NUT Mid Sweden University	Poland Denmark Latvia Poland UK Sweden Sweden Staff ETUCE ETUCE ETUCE Interprètes



