F I N A L R E P O R T

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN TEACHER EDUCATION

Course No: CoE 3602

Stord/Haugesund College - Postbox 5000 - N-5409 STORD
from 23/06/2002 to 29/06/2002
website: **http://hugin.hsh.no/lu/inf/eu/2002/**

Seminar organizers:

Council of Europe In-Service Training Programme for Educational Staff (Strasbourg, France):
http://www.coe.int/T/E/Cultural_Co-operation/education/Teacher%5Ftraining/

Network Norway Council, Section for Continued Training of Teachers (Oslo, Norway)

MIA QUARTIER – VVKSO – BELGIUM
HOLLANDLAAN 23 – 8700 TIELT
mia.quartier@vvkso.vsko.be

Reasons for attending

In my application form I wrote: "As a teacher trainer I hope to share the experience I have built up for the last few years, and discover new methods of ODL. Especially I am interested to learn more about e-learning, building interactive courses and other learning materials on the Internet, setting up intranet and extranet applications with interactive database features, on line testing of ICT skills with instant feedback and automatic reporting, etc …
Exchanging ideas, information and teaching material and establishing links with colleagues from other countries always has been very motivating and stimulating to me."
I was nominated to attend the course by my local authority: Jacques Denies, VVKSO[1] ICT project leader encouraged me. Jacques is constantly looking for wider horizons and expects VVKSO trainers to deploy on the international forum.

Main lessons learned/experience acquired from attending the seminar

I. **What lessons have I learned by comparing developments in the host country with those of my own country?**

The Video transition from Copenhagen, with Elsebeth Korsgaard Sorensen[2], Associate Professor at Aalborg University "**Collaborative learning in virtual learning- environments**" was a thoroughly and scientifically analysis. It was very interesting to see her reports and "lessons learned" out of the result of her experiments e.g. with the use of discussion boards.
Developments of techniques in our country are very much alike: video conference is a powerful tool to *see and listen* to someone at the same time in a different place. But maybe it is more than that? *Interaction* at distance indeed is possible, but we admit that we did not take the opportunity. Why not? There still are some barriers:

- the impersonality of the camera
- technical aspects can disturb the audience: sometimes we loose concentration on the content
- the sometimes confusing alternation of views on the professor and her presentation showed the limits of the system
- training is a must for "actors".

Also comparable (Norway-Belgium): collaborative learning in virtual learning-environments still is a topic for *universities and higher education*. What about *secondary schools*? Is it all a question of "economy comes first"?
Elsebeth's answer:

- for primary schools: think about socialization, face to face, and emotional aspects of education!
- for high schools: integrate systems partially, and try to discover the possibilities of simulations.

These made us (group 3) think about pros and cons of the use of on line learning in secondary schools:

- Pros
  - increase of motivation of students
  - improvement of students performance
  - a solution for children that can not be in the classroom because of different reasons (illnesses, distance, weather conditions …)
  - collaboration between teachers/schools/ministry/pupils/parents is possible!
- Cons
  - there still is a lack of ICT tools in some countries (e.g. Bulgaria!) to implement it
  - lack of good content (exchange of didactical material still doesn't fly yet!)
  - are teachers not prepared? Are all teachers ready?
  - and what about on line exams? In this field there still is a long way to go until every teacher can use/develop them.

[1] http://www.vsko.be/vvkso
[2] http://www.hum.auc.dk/ansatte/es/

Our experiences with ICT in the project called "PLUTO" (by project leader Associate Professor Knut Steinar Engelsen) bubbled up the question of *continuous assessment*. Summative and formative assessments still seem to be most common in all countries, but undesirable. We think that those permanent assessments should be included more intensively into the teaching strategy. This is especially important in the science field! Here again, we discovered that the new accent we in Belgium put in our training program namely "on line testing" is worth doing: it can bring thé solution for an innovation in the educational system.
Also the fact that "*there seems to be a significant correlation between ICT-competence and attitude to ICT: the more competence the more open-minded and positive ...*" is an affirmation that the continuous effort and energy we put in providing training of basic ICT skills is the right choice!

Our experiences with e-learning tools like Class Fronter and IT's learning. (Assistant Professor Anders Grov Nilsen and Associate Professor Svein Ove Lysne.)
We recognize the same quest for the right tool for e-learning in different countries. As in Haugesund college professors still are comparing platforms and students use different platforms, we feel that in Belgium we already have made one step further by integrating platforms completely in our teacher training program. It looks as if professors of Haugesund are not convinced yet of the real added value of a platform, except for the use of digital portfolios. Thanks to our access at ClassFronter[3] we have had the opportunity to act in a virtual environment. In the forum of http://fronter.com/hsh/ we find this contribution:

"How can tools like this support teaching and learning?
It's more or less only written information , what does that lead to? Only for academic people?
Can teaching be netbased?
Our experiences so far says that the content, curriculum - the material to be thaught can be presented or distributed on the web. But teaching, learning and work has to be done in laboratory, communities of practice, workshops, shipyards, in auditoriums and classrooms."
(Written by Anders)

We feel that what we have done so far in Flanders with E-learning using Blackboard.com and Blackboard 5.5[4] is pioneering! With a platform EVERY teacher with basic ICT skills can share his work and communicate with colleagues, pupils, parents etc … in a protected environment. Moreover, especially the power of on line testing with instant feedback and automatic reporting is innovating and saves a lot of time for teachers.

The new European Network University - how to get a masters degree anywhere and anytime (by the Associate Professors Harald Haugen and Bodil Ask from Agder College) and **Problem based Learning and ICT support** (By Dr. Polit Lars Vavik): Norway has built up a huge experience on ODL! The e-learning initiative and mENU-project are brilliant examples of very promising international standards!

Are any of these points likely to have a wider application throughout the signatory states of the European Cultural Convention?

When it comes to collaborative learning there still is a lot of work to be done. So let's start with collaboration between teachers. We accept that innovation in education has to be developed from below, not from the government. But we "build the boat while sailing it", and teachers finally do want to share their work.
But therefore, they need **an easy-to-use e-learning platform,** the main need for the teacher who wants to implement ICT in his lessons in the most practical way. This tool is the innovative step in the evolution of ICT-based education. It offers the teacher a server-based course-publishing tool through which he can share his contents with colleagues and with his students. It offers all parties different means of communication: e-mail, discussion board and chat. And it provides an evaluation

[3] http://fronter.com/hsh/, username eu2, password eu2
[4] http://bb.vvkso-ict.com

tool, being test pools and a grade book. It is the perfect tool to make diversification, distance learning, permanent learning, and permanent student-assistance a reality, provided all parties have regular access to the platform.
But platforms are very expensive. Blackboard costs the organization I work for (VVKSO) some € 5500 a year on a three-year contract base. Individual schools cannot invest this kind of money. Moreover, the American company is boosting its prices in such a way that re-investing in the system will be virtually impossible. Because of the last disadvantage many initiatives are popping up in Europe to create similar platforms. In Flanders alone, we have seen and analyzed different alternatives, though none are as good as Blackboard.

I think that it would be **a very good European investment to develop an educational platform**, written to fulfill the need of the European teachers, students and parents.

II. To what extend did the seminar meet my expectations?

As far as "exchanging ideas, information (and teaching material) and establishing links with colleagues from other countries" is concerned: yes ok, expectations fulfilled! Imagine: our Cyprus colleague Polycarpos entrusts us that Cyprus is deliberating about using the Belgian federal model to solve the Greek-Turkish-Cypriotic problem (during the conference, a Cypriotic on line newspaper reports that the proposal has been rejected!).
For "sharing the experience I have built up for the last few years", I was at the wrong address: in the *Introduction to the topics of this seminar* was mentioned "What the seminar is not supposed to be: … a seminar where we all tell each other about our recent findings".
Discovered new methods of ODL? Yes, lectures dealing with trends in Open- and Distributed Learning Material on the Internet, as well as presentations of examples were very inspiring and will help to develop new ideas in our practice. But as far as "the seminar will be organized as a workshop" is concerned, I am a bit disappointed. As Elsebeth said: "If the objective is online dialogue, online dialogue should be part of the assessment". I expected us to USE ICT in a conference on ICT IN TEACHER EDUCATION. We actually did: in the flying start, with the video conference. But especially the use of an English e-learning platform would have helped to overcome some practical problems like working with diskettes in a protected network environment, or sharing documents between different groups. Actually the platform was present (ClassFronter) and we did have access, but it only appeared shortly in a workshop, unfortunately not as a tool in the ICT conference.

III. What additional benefits have I gained from your discussions with colleagues from other member states?

Working together with people from different countries and background is very intensive and time consuming. To collaborate in order to make a final presentation is a very interesting experience through which I learned a lot about the dynamism in a group, the division of tasks and the difference in ICT skills among the group members.
I also discovered that **Babelfish Translation** (from Altavista) is very helpful to overcome language problems in an international discussion.
Also taken home with: plans to set up a *Comenius project for teachers*: as Mr. Bernat Martinez Sebastian from Spain has built up a lot of expertise in ICT in science education (real time experiments using computer-interface-probe; design of learning activities using simulations (mainly applets); use of the web cam and digital video; use of Internet resources…) we have agreed on keeping contact. The mission of Dr. Salomon in mind we will try to "connect those single islands" by going on with communication about ICT in science education. Also one of our main tasks we can develop together in the future project: to teach pupils/colleagues *to ask intelligent questions* is a topic that can be very useful in science education.

Application of experience

I. **How do I plan to use the information/ideas provided on the course in my own lessons?**

First of all: a profound study of all aspects of Elsebeth Korsgaard Sorensen *"Collaborative learning in virtual learning- environments"* and her website will be done to gain the best benefits for collaboration between our teachers in our teacher training program. Especially the differences between written and spoken communication will be analyzed: "a net based learning environment is a written universe".
Of course a lot of processing will be done on the lecture and discussion panel with Gavriel Salomon: translation and adaption of the ideas to our educational system is in progress.

II. **Examples of ways in which issues raised during the seminar will fuel current debates within my country and its institutions.**

The PowerPoint presentation of Elsebeth Korsgaard Sorensen "Collaborative learning in virtual learning- environments" has been put on line. It is a detailed analysis full of techniques, tips and trics, pros and cons. As it has been presented as a video conference, a lot of content was momentary and passed by. A translation of the document will bring all aspects lively again, and will be used in our research and experiments with the use of e.g. discussion board. It also will be the subject of a lecture on one of the next meetings of our ICT coordinators.
The platform Fronter[5], although just mentioned shortly, is worth a exploratory investigation. It offers a platform for project management (Projectfronter), teamwork (Teamfronter) and e-learning (Classfronter). What about the price? Maybe it could be a good alternative for Blackboard that is too expensive for Flemish schools.

III. Ways in which I plan to disseminate my experience

Throughout all lectures, discussions and debates, and as a climax in the keynote speech by Dr. Gavriel Salomon, Professor at the Haifa institute in Israel, **"Instruction and Technology – Why does this marriage still doesn't fly?"** the two main domains for ICT applications in education appear as a "red thread": *communication and searching*!
The affirmation of the importance of *communication and searching* gives us new energy to invest in the ideas we recently developed for the next year of our ICT project work.

Communication:

A new tool "Sharepoint team services[6]" (STS) will be tested and implemented. This MS application will allow us to stimulate interaction between teachers and "bridge ivory towers". It will help us to connect "those single islands of wonderful exceptions", those examples of "groundbreaking uses". It will also help us to make "common front" and get much more out of it: we have to increase the low 16 % of teachers that use ICT for communication, share their work and discuss. To turn information into knowledge we will make learning communities, and exercise in tutorship, the guarantee for social appreciation of knowledge!

Searching:

One of the largest challenges for a teacher is "to bridge the gap between the forest of information and the beach of knowledge". Salomon taught us that we can't *possess knowledge*; we only can have *access to information*. But as you need knowledge to have access to information, we have to concentrate on teaching our pupils/teachers *how to ask intelligent question*s and how to structure information.

[5] http:// fronter.com
[6] http://www.microsoft.com/belux/nl/office/sharepointts/

Further training in interactive database features as the solution to *share content* and to make educational content accessible is very sensible and worth investing in.

Project work:
As Dr. Salomon added rightfully to the two aspects mentioned above: it all should be integrated in and worked out in the context of *interesting exciting projects*. Our teachers, and first of all we as teacher trainers, should be **initiators, inviters and improvisers**. As there is not yet a European platform available we will invest in research on how to expand STS as mentioned above to provide not only communication via (web) discussion and content but also via e-mail. Moreover we are convinced that the integration of a tool for generating automatic feedback, project-management, editing and validation is enough to continue our pioneer work in innovation in education through ICT.