

eLearning forum

Bremen, Germany

Preparing universities for the ne(x)t generation of students

Post-conference report

The truth behind the 'net-gen myth' and the implications for higher education were at the heart of the debate at the eLearning Forum held in Bremen, Germany, on April 17th and 18th 2008 and organised by the eLene-TLC project with the support of the European Commission eLearning programme.

eLene-TLC addresses the improvement of ICT supported teaching and learning in European HE institutions, building on the work of past and ongoing initiatives such as the eLene-TT eLearning project for teacher training (2005-2006). The project aims to encourage the widest possible take-up of innovative approaches to ICT, reaching out not only geographically but also involving new target groups through focus groups, training actions and seminars to form a community using and contributing to a virtual Teaching and Learning service Centre.

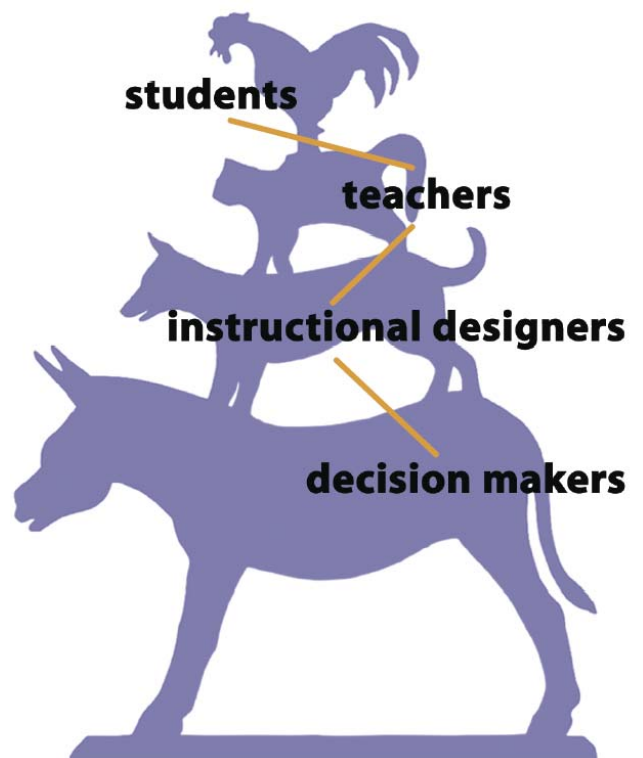
■ Editorial

Deborah Arnold, project manager at Vidéoscop-Université Nancy 2 and eLene-TLC coordinator, reflects on the impact of the Bremen eLearning Forum.

"The objective we set ourselves in organising the Bremen eLearning Forum was to provide the opportunity for eLene team members and the wider community to engage in discussion and interaction as well as to present the intermediate results of the project. In this way, we were able to gather reactions from our different target groups to feed back into the project. I think we can say that this objective was achieved, thanks to the varied programme of plenary presentation sessions, round table and smaller workshops. For me, the biggest achievement was involving both decision makers and students, in addition to teachers and other higher education stakeholders of course. In particular, we learnt a great deal from the students, about how they use ICT for leisure and learning, what they

expect from their university and their vision of higher education in 2023. On this last point, the knowledge café which brought together both students and decision makers drew out some very interesting scenarios for the future, in a relaxed atmosphere with just the right amount of friendly competition! [See page 6 for more details.]

In conclusion, I would say that the Bremen eLearning Forum has enabled us to confirm that we are on the right track and that the issues of pedagogical competency in the use of ICT, including information literacy, are priorities that European higher education institutions need to address in order to enable students to participate fully in the knowledge society."



■ eLene-TLC project findings

The Bremen Forum participants got the chance to hear about the eLene team's findings and ongoing work in relation to educational ICT competencies for students, teachers and educational technologists and to share their own experience.

The eLene-TLC project focuses on preparing universities for the net (or simply next) generation of students, developing a common competency framework for the pedagogical use of ICT by students, teachers and instructional designers, designing and running a series of professional development and self-assessment activities and providing access to all resources through a Teaching and Learning Centre, which gives the project its name.

Students' needs and expectations

Ineke Lam & Magda Ritzen, IVLOS Institute of Education - Utrecht University

"Students want wifi on campus and fast communication with teachers."

"Quality of information comes way ahead of design."

Net-generation, millennials, Google generation, digital natives or homozappiens¹... the generation of students that comes to our universities is changing. They are in an 'ICT-default' mode and learn in a different way. According to the literature, net-generation students learn by doing and are fast and impatient, result-oriented, social and interactive, multi-tasking, visually oriented, connected and mobile.

The eLene-TLC project decided to test these assumptions through research, questioning not only students but also teachers. Six institutes from six EU countries (France, Germany, Italy, the Netherlands, Spain and Sweden) participated in the study to answer the main research question of: "What do first year students in higher education need and expect from ICT in their learning process?"

Through group interviews with around 80 students (12-15 per country) and individual interviews with teachers, the partners investigated the use of ICT at home and at university among the two groups.

Some of the results of the research with students were that while they were regular users of ICT at home for information and amusement, with the most frequent tools being mobile phones, email and MSN, their previous educational use of ICT (in secondary

school) was limited to giving presentations and information searching, often due to the lack of available computers. As regards their expectations of ICT at university, wifi on campus and fast communication with teachers came out top, along with virtual learning environments and video lectures. Many students were reticent about the use of games, mobile phones and chat in an educational setting, though they agreed that when used "in a proper way" these could be applied to learning.

The most important characteristic of ICT-supported learning rated by the students was quality of information. Design was considered the least important, which has major implications for the production of learning content. As regards behaviour and learning style, most of the students agreed that 'being social and interactive' is the most important feature of youth today.

According to the teachers in the different countries there is a difference in the way they themselves and students value tools they use in their daily lives. For teachers, the top tools are e-mail and internet followed by mobile phones. In their eyes, with the exception of the French partner, the mobile phone is the most important device for students.

In general, teachers in all countries use e-mail, internet, presentation programmes like PowerPoint and VLE's in their teaching and learning process.

The German and Swedish teachers mention additional tools such as blogs, wikis, podcasts and e-portfolios.

From the teachers' point of view, students are required to use VLE's and LMS's in higher education as well as internet and e-mail. Furthermore, Germany and Sweden mention various additional tools such as online exams, simulations, electronic quizzes and special software applications.

Finally, the majority of teachers think that in principle one should not exclude a tool without good reason. Each tool has its own purpose. Teachers should choose the appropriate tool according to the task to be performed by the students. ICT should be used with the clear goal in mind of how improving the learning process or creating an innovative educational experience.

The implications for new ways of education are that ICT should be up to date, support collaborative work (social and interactive) and be a means to offer better service (web lectures). Students do not expect their university to be a front runner, but the quality of information needs further attention.



[¹ respectively Tapscott, 1998, 1999; Oblinger & Oblinger, 2005; Howe and Strauss, 2000; JISC, 2008; Prensky, 2001, and Veen, 2002]

The eLene-TLC competency framework

Teresa Guasch, Universitat Oberta de Catalunya (UOC) & Magdalena Jasińska, Maria Curie Skłodowska University in Lublin

Part 1: Transnational study of educational ICT competencies for higher education teachers¹

Competency can be defined as "the complex system of actions that integrate knowledge, practical skills, attitudes, value orientation, emotions and other social behavioural components that together can be mobilized for effective action".

Starting from this definition of 'competency' developed during the previous eLene-TT project, the eLene-TLC team set about defining a series of educational ICT competencies for higher education teachers, through

a dual approach of net-based focus groups validated by a Delphi consensus method.

8 net-based focus groups involving 60 participants from 16 universities took place simultaneously in 4 countries (Spain, France, Sweden and the Netherlands).

Participants were teacher trainers and teachers with experience in the pedagogical use of ICT to teach in HE. Discussion took place through an online platform over a period of

15 days.

The discussion focussed on the following main questions:

- Which competencies do higher education teachers need to teach with the support of ICT?
- Which teaching and learning methodologies are considered most suitable for the design of practices that favour the development of these competencies?

The focus group enabled us to design a questionnaire for the Delphi

Method.

This second stage involved a group of 78 European experts who answered the questionnaire in two rounds, with the aim of reaching consensus on the following points:

- Current teacher functions for ICT supported teaching and learning.
- The specific competencies that are demanded by these new functions.
- Any tasks or problems that teachers face in ICT supported teaching and learning.
- The need for teacher training to improve teaching with ICT in higher education.
- Methodological criteria for designing teacher training practice to improve the teachers' competencies for teaching with ICT in Higher Education and the pedagogical use of ICT.

The end result was the validation of the eLene-TLC competency framework based on three main roles (planning/design, pedagogical and social) encircled in two domains (management and technological). For each of the roles or domains, a list of associated educational ICT competencies for teachers was devised. Planning/design role: Teachers design the planning, monitoring and organisation of the learning process. They provide supporting tools to enable interaction between students and with students concerning learning goals and assignments. Teachers plan the

activities/supports that assist students in the acquisition of self-organisation and self-regulation skills. The activities and supports must explicitly scaffold the acquisition of these skills in specific contexts related to specific domains.

Pedagogical/instructional role: The teacher masters the field of expertise (strategic teacher and expert in his/her professional field), gives support during the teaching and learning process and promotes deep learning that is both complex and critical. This role refers to the abilities necessary to create learning situations by proposing activities to which content will have to be associated. Social role: The teacher stimulates the process and promotes a communicative atmosphere (cohesion, team motivation, commitment) that favours interaction and cooperative knowledge building.

Teachers must foster the creation of a community of learners in order to diminish the feeling of isolation and help create a group identity. Management/organisational domain: The teacher must be competent in the organisation of information, either in a blended or in a fully virtual learning environment, before, during and after the teaching and learning process.

Technological domain: The teacher must be competent to use ICT within

an educational framework.

In addition to the identified roles, the Delphi experts concluded that teachers should work in a team with other professionals who give them support on the planning/design, technological and organisational tasks, meaning that teachers are fully in control of the learning process, but that they receive support from teams depending on their demands and needs.

Finally, the work of this first year is now being applied in the form of Professional Development Activities, designing and running training actions to develop the various competencies defined by the focus groups and experts, as illustrated in the afternoon parallel session (page 6).

[See page 4 for an overview of the competency framework and how it has been applied to the other target groups of students and educational technologists.]



78 European experts from 12 countries participated in the Delphi method.

[¹ Work carried out by: Teresa Guasch, Anna Espasa & Ibis Alvarez]

Part 2: Competencies, guidelines and resources for instructional designers

The workgroup focussing on instructional designers took a slightly different approach, considered more in keeping with the production-oriented nature of this target group's activity. Nowadays, the term "instructional designer" may appear a little old-fashioned. More up-to-date seems to be the term "educational technologist" which is becoming more widespread and with which more partners seem to identify. Such a function can be considered to be the interface between the teacher and the multimedia developer. In other words, we are talking about somebody with a pedagogical background on the one hand and an ICT background on the other. In many cases teacher, instructional designer and multimedia developer will be one and the same person. This is why we rather think about the role of instructional designer/educational technologist than a person.

Starting from a definition of eLearning project types in which an instructional designer (ID) might be involved, the partners identified the different stages in each project type, the moments at which an instructional designer intervenes, the tasks to be performed at each stage and

the associated competencies required. For each task and competency, the partners then identified training resources and provided guidelines with a view to helping members of the target group develop their competencies in this field.

What we did first was to distinguish 3 sectors in which project types may be developed: academic (for universities and higher school courses), corporate (for business, LLL, company courses) and the general public (for people using Internet). In these three sectors courses are designed either by a single person (the ID working alone, or the teacher fulfilling the role of ID) or by a team where the ID is one of the members of such a team. When he/she works alone then in such a project there is considered to be no multimedia production per se. An ID may develop courses that are

purely on-line, blended or face-to-face. In each he/she will have to have slightly different competencies. When we talk about F2F projects it is always enriched by using multimedia and it is the role of the ID to know how these multimedia elements should be designed and blended with traditional teaching.

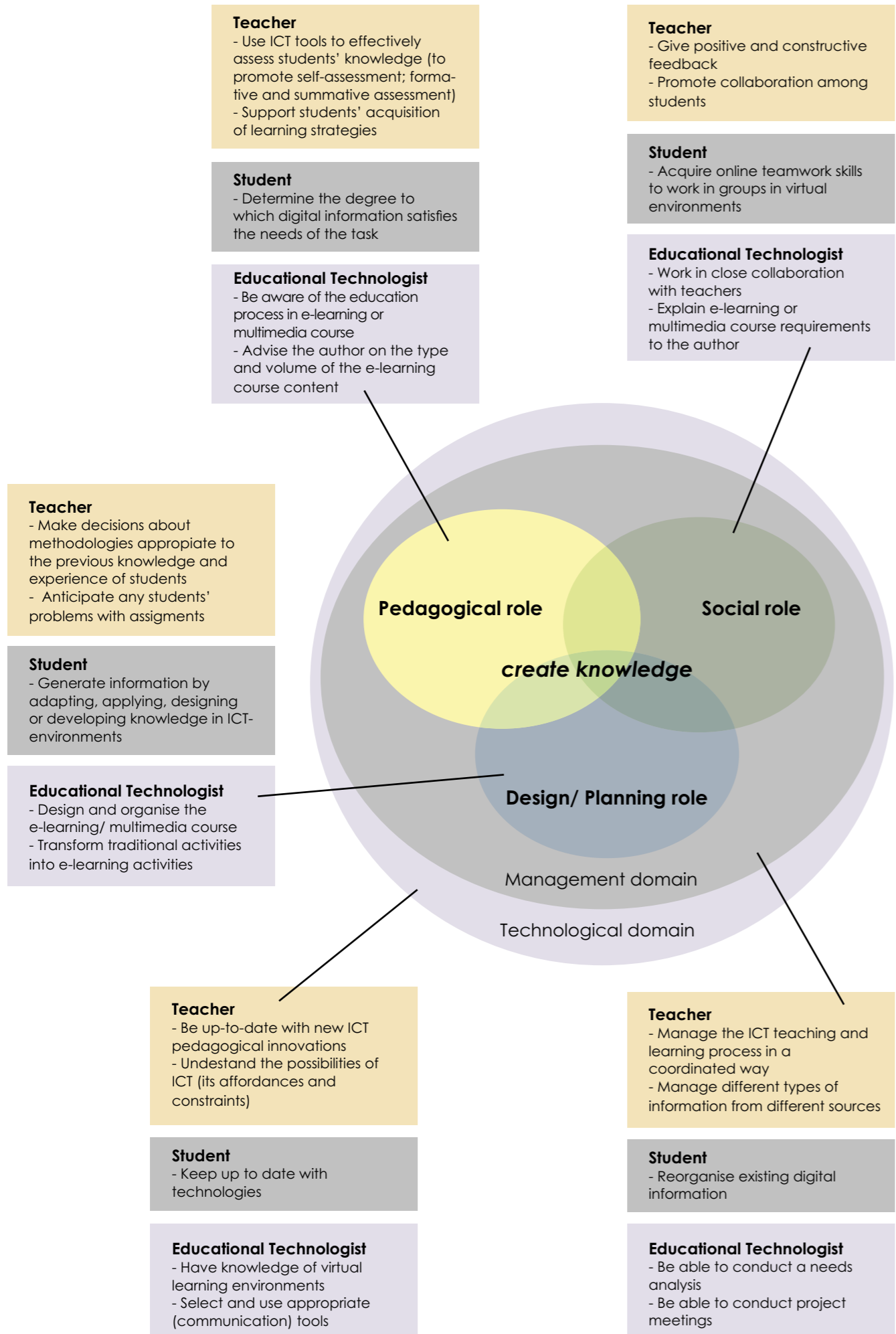
As for the teachers and students, the instructional design competencies are classified according to the overall framework: communicational (including language and linguistic competencies) relating to the social role in the eLene framework, pedagogical, media design (design/planning role), technological and project management.

In addition to the definition and classification of competencies, the work group also set about collecting and evaluating resources and writing guidelines to support instructional designers and educational technologists in developing these competencies. These resources and guidelines will all be available via the TLCentre (see page 5) and in a self-help centre. This was developed further in the specific afternoon parallel session (see page 7).



guidelines to support instructional designers and educational technologists in developing these competencies. These resources and guidelines will all be available via the TLCentre (see page 5) and in a self-help centre. This was developed further in the specific afternoon parallel session (see page 7).

The eLene-TLC educational ICT competency framework with examples of competencies for teachers, students and educational technologists



The Teaching and Learning Centre

Spyros Abatielos, ZMML - Bremen University

The Teacher Training Centre or 'TT-Centre', a Teaching and Learning web portal for the easy storage and retrieval of eLearning resources defined according to LOM, was one of the major outcomes of the eLene-TT project, the successful predecessor of eLene-TLC.

Part of the eLene-TLC project is to further develop the TT-Centre according to user needs. Furthermore the project will extend the target group from teachers and teacher trainers to cover the whole spectrum of people related to education and eLearning, from policy makers and instructional designers to students. In order to better meet the needs of these different target groups an online questionnaire was developed allowing the TT-Centre users and visitors to give their opinion on several areas.

Questions covered functionality, resources, scenarios and the possibility to add comments. Likeable points were the fact that the TT-Centre brings

together different international tools/resources, the scenarios and the clear structure of the website. The aspects which were highlighted as requiring attention were the inclusion of more resources but also the removal of old ones and updating of existing ones, to have links to similar resource pools in other countries, more interactivity, to improve the menu system and the "ID cards" (detailed descriptions of resources), to connect the scenarios to the resources and to offer a help function on the actions that can be performed in the TT-Centre.

New features to include in the TLCentre are a search option based on the intended end user, forums or other means of communication between users, RSS feeds, a personal page and to be able to see which TLCentre users are experts for a particular resource.

Spyros demonstrated the functionalities which are under development

or completed, including the menu system, graphs to visualise the information more easily, ID Cards, the personal page, favourite resources and a search option based on the intended end user. The coming months will see the integration of new resources, the updating of existing ones, links to similar resource pools in other countries as well as the development of more interactivity and RSS feeds, the connection of scenarios to the resources and more user-centred functionalities.



Discover the Teaching and Learning Centre: www.tlcentre.net

Keynotes

Ne(x) Generation Universities – making a subculture mainstream

Karsten Wolf, professor for Didactical Design of Interactive Learning Environments, Bremen University

Karsten Wolf set about examining the net-gen myth, looking into exactly how the younger generation are using technology in their daily lives and the implications for higher edu-

cation. Among the valuable insights provided by the 2006 and 2007 JIM Studies¹ are that the top application among young people is instant messaging and that 25% of German

12-19 year-olds play multi-user games on a daily basis. With respect to higher education, Karsten classified future evolutions into easy, medium and hard solutions, arguing that the easy part is integrating technology (wifi, mobile gadgets and the selection of sup-

port services). The medium difficulty level concerns 'space', in other words redesigning the architecture of our universities to provide a physical environment conducive to collaborative and spontaneous learning, which are open to self-organisation and nice to hang out in as well as being flexible and adaptable.

According to Karsten, the hardest part is ... people! Different stakeholders have different priorities. The politicians want to know how technology makes learning cheaper or better; students focus on how learning could become faster, richer, easier, more convenient; for teachers it's a question of saving time and gaining more satisfaction.

"Technology can take the drudgery out of teaching."



On this latter point, we need to convince teachers that technology can take the drudgery out of teaching and learning, that it can spark

thinking and new ideas, increase the flow and fun, enable the recruitment of good students and contribute to the teacher's own learning and research. Karsten then went on to illustrate how his own teaching has evolved, increasing the contribution of students through collaborative writing of course content via a wiki to the point where 90% of the material is now student

produced! The conclusion being that this has led to deeper learning, higher motivation and a significant reduction in the participation gap. To sum up, he believes that change will not be automatic, that internet-savvy students remixing the web are still rare, that the technology is at hand but that we need to rethink the architecture of our universities. The paradigm shift is towards openness

and distributed authority, but that we need to focus on training the next generation of teachers and students. For more information: wolf@uni-bremen.de www.ifeb.uni-bremen.de/wordpress_wolf/ [<http://www.mfps.de/index.php?id=11>]

Megadigitale – implementing the eLearning strategy of the Goethe-University

Claudia Bremer, eLearning expert, Johann Wolfgang Goethe-University, Frankfurt

Claudia Bremer began by setting the scene behind the eLearning strategy of the Goethe-University, which was faced with the necessity of reconciling a wide range of study combinations with a large number of commuting and part-time students. The objective set by the university was to improve the teaching and study conditions through the implementation of new media. For example, strategic lectures are recorded to meet the needs of students commuting from one site to another and missing parts of lectures, or for those students whose exams are in one or two years time. The hype about wikis was addressed by a study

on how to use them and Second Life was used for role-play. The question of top-down or bottom-up approaches was also raised, with the conclusion that a judicious use of both was most effective. Teachers have the opportunity to request funding for projects with the dean showing how the project in question fits with the department's strategy. A series of pilot departments were selected, with the pre-condition for funding being the commitment of these departments to convince others! A clear organisation of stakeholder teams was set up, with regular meetings and informal moments to

discuss progress and issues arising. In particular, services offered to students included special workshops, eCompetence nights and days, a media competence certificate and support for media production and information generation (podcasts, wikis). All this was made possible thanks to the German Ministry of Education MEDIDA prize, which the Goethe University won in 2007 for the Megadigitale project.

For more information: info@megadigitale.de www.megadigitale.uni-frankfurt.de/

real experience, the conclusion was that such collaborative learning is extremely difficult, especially when the training time is very short and even when the participants are experts in the educational use of ICT. The group then looked into a series of possible solutions to improve interaction and addressed the related constraints. The first proposal was to lengthen the training time. However, this emerged as a false solution for time-poor participants. Further ideas included self-presentation in a forum message (insufficient to create social links) or by audio/ video file, which requires time to train in the use of the software. If the technology is available, a chat could be used to introduce the training and the participants or to propose simple activities in small groups. Speaking of tools, Ineke Lam and Magda Ritzen then presented an annotation system, a collaborative tool for discussion in context, to give specific feedback and develop more efficient communication. This web-based tool shows both the document and the discussion on the screen. Ef-

fective feedback on texts is: - on time (with a plan phase and a revision phase) - specific - aimed at content + structure+ style - and contains all 4 feedback functions (Analysis, Evaluation, Explanation, Suggestion). Peer feedback is criterion-referenced through headings and constructive. Motivation is also an important factor, for the feedback provider (the writer rates the feedback (s)he receives) and for all participants through clear rules concerning the expected frequency of posting and reacting. The third presentation by Claire Englund covered the use of wikis to promote interaction in online environments. After showing Lee LeFever's amusing video "Wikis in plain English" Claire illustrated how they can be used to support learning, through examples of collaborative work by students (<http://lakemedelgrupp-bjorn.wikispaces.com/Fr%C3%A5ga+1>) and teachers (http://mobil.upc.umu.se/groups/natrix/wiki/9988e/Test_av_Maratech.html). Yet we still need to ask why exactly we should

use wikis. To help make the question more precise, it was reformulated as "What affordances are created for learning, teaching and assessment through this particular use of technology and how do these change learning outcomes for students, the teaching process and approaches to assessment?" First of all wikis can be seen to enable students to work collaboratively, independent of time or place. For teachers they are relatively easy to set up and don't require a high degree of technical skills. In assessment terms it is possible to follow individual students and group processes. The potential constraints that we need to be aware of in each case relate primarily to technical problems with the software. The main conclusion of the workshop was that technology can enhance collaboration among students and between teachers and students in an online learning environment. However, the potentiality of technological tools is dependent on the way teachers and students use them in the teaching and learning process.

Check out the video "Wikis in plain English" on YouTube: <http://uk.youtube.com>

"Top-down and bottom-up!"

Parallel sessions

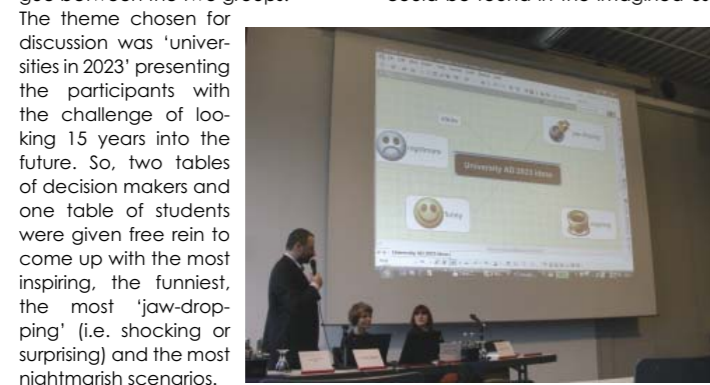
Knowledge café for students and decision makers: imagining the university of 2023!

MC: Andrzej Wodecki, MCSU

A knowledge café is an informal yet structured space for discussion and exchange which, when it works well, leads to the creation of new knowledge. As it is quite rare in higher education institutions for decision makers and students to get together, we decided that such a format was the perfect solution to encourage dialogue between the two groups.

Writing, scribbling and drawing on large sheets of paper, the three groups set to work individually before sharing their ideas, guided by the very competent, though not always impartial, Master of Ceremony Andrzej Wodecki! It turned out that students and decision makers had very different views, though convergence could be found in the imagined use

of technology – while students imagined learning in augmented reality with the aid of special glasses, the decision makers went one step further and had students equipped with microchips implanted in their heads for contextualised, just-in-time learning... At the end of the day, the students won 3:1, coming up with the suggestions for the scenarios considered most inspiring (less hierarchy) and funniest (reality show evaluation of teachers) as well as the nightmare of exclusively multiple-choice exams. The decision makers produced the most jaw-dropping scenario of 'no universities', where these are replaced by think tanks and competence centres. But remember, these are not all scenarios that we want to happen, just what the participants imagined might emerge in the next 15 years.



Professional Development Activity: promoting interaction in online learning environments

Teresa Guasch, UOC, Ineke Lam and Magda Ritzen, IVLOS - Institute of Education, Utrecht University; Gérard Casanova, Université Nancy 2; Claire Englund, University of Umeå

The aim of this session was to draw out the key success factors for improving interaction in online environments through presentations and debate covering both strategies for promoting interaction and appropriate tools.

The session began with the participants and presenters getting to know each other before an introduction to collaborative learning by Teresa Guasch, asking the questions "What do we understand by collaborative work?" and "What kinds of interaction

do we know within an online environment?" A first case study was then presented by Gérard Casanova addressing the question "Is collaborative learning in a fully online environment possible with participants who didn't know each other before?" Based on

Workshop on competencies, guidelines and resources for instructional designers

Moderated by Magdalena Jasińska MCSU & Cécile Chevalier, Université Paris Dauphine

This session gave participants the chance to be involved in the process of developing the competencies of instructional designers and to discover and comment on the competency framework with guidelines and resources (see detailed description of methodology on page 3). Participants were divided into two groups to work on different tasks leading to the definition of the competency framework for instructional designers, each group drawing on large sheets of paper to support the discussion. Group 1 worked on the project type: academic > team > blended learning > with multimedia. Group 2 worked on the project type:

corporate > team > pure e-learning > with multimedia. Both groups were expected to define the roles of team members in their projects with special attention being paid to instructional designers. Participants of the workshop were very enthusiastic and showed great interest while working on their tasks in a relaxed but studious atmosphere. The two groups showed different approaches to the analysis of tasks in their projects. Group 1 focused on different phases of the project (setting-up > production > testing > implementation > evaluation > support and sustainability) while group 2 focused their attention on different aspects of an e-learning project (content,

copyright, quality, management, guidelines, user interface etc.). While discussing the results, the importance of sharing a common understanding of terms emerged as a vital factor for effective communication. In both projects for example, 'content producer' was used but with a different meaning in each. Group 1 understood this role as an author who provides materials (training content) while group 2 meant multimedia developer (producer of CD or other devices). To round off the workshop, participants discovered the virtual self-help centre for instructional designers (elene-designer.ilab.pl) developed as part of the eLene-TLC project.

Two groups=two approaches

Nightmare scenario for students: multiple choice exams!

Most inspiring scenario: less hierarchy

Annotation system www.annotatie-systeem.nl



■ The first eLene board meeting

The Bremen eLearning Forum was also the opportunity for another important event – the first meeting of the eLene board of directors, set up as part of the project's drive to involve decision makers. Chaired by Deborah Arnold, the meeting was attended by 14 participants representing the 9 eLene institutions, including vice-rectors, ICT in education delegates and directors or presidents of eLearning units as well as Daxa Patel, the eLene-TLC external evaluator.

The agenda of this board meeting was twofold. Firstly to discuss and validate the eLene cooperation agreement which will formally establish the group over and above collaboration through EU funded projects and which opens up the possibility for other institutions to join as associate members. The second part of the meeting focused on the joint policy statement to be published by the group.

The eLene board members discussed in depth the question of incentives for HE teachers. This was the continuation of a process started in 2005 with a study of ICT in education policy conducted among the eight partner countries. Reviewing this study three years on leads us to conclude that although much progress has been made towards integrating ICT in higher education teaching and learning, we are forced to admit that mainstreaming will not truly occur until teaching itself is fully and formally recognised in an HE teacher's career. ICT, combined with other evolutions affecting higher education such as the Bologna process, can and must be the catalyst for such change, putting teaching firmly on the political agenda.

The joint policy statement will thus cover in detail the proposals studied by the group, including qualification systems integrating pedagogical requirements in ICT supported teaching and learning linked to salary scales; peer review and quality systems for producing online teaching and learning materials linked to academic recognition; scholarship and the integration of teaching with research processes; the introduction of prizes and awards for the innovative use of ICT and the necessity for universities to invest in change management.

"... we need to provide incentives for top teachers"

To find out more about eLene-TLC:

www.elene-tlc.net

And about other projects of the eLene group:

www.elene-centre.net



■ Contact

Deborah Arnold

eLene-TLC coordinator

Vidéoscop-Université Nancy 2

Deborah.Arnold@univ-nancy2.fr

■ eLene-TLC partners

Vidéoscop-Université Nancy 2 (FR) - Coordinator

Université Paris-Dauphine (FR)

Politecnico di Milano - Centro METID (IT)

University of Bremen (DE)

Universitat Oberta de Catalunya – UOC (ES)

Finnish Virtual University (FI)

University of Umeå (SE)

Utrecht University (NL)

Marie Curie Skłodowska University in Lublin (PL)



eLearning

The eLene-TLC project has been funded with support from the European Commission.

The content of this publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained herein.