

Challenges and training needs of E-supporters

Sven Åke BJORKE, Norway

Key words: Global e-courses; e-learning problems; challenges in e-learning; training the trainers; student support, supporting supporters; international educational networks; mutual recognition of competence key words, theme, etc.

SUMMARY

Many educational institutions now take their first steps into online education. Good online education can be a driving force for quality enhancement, standardised course development procedures and internationalisation of studies and joint degrees between networks of educational institutions. E-learning has developed in stages from traditional correspondence courses by e-mail, through high-tech self-instructional interactive courses to increasingly collaborative learning in 'virtual' communities of practice in online learning platforms. The UNU-GVU network has developed an e-pedagogy adapted for multicultural, global studies with participants residing in different countries and continents but collaborating in a common virtual classroom. Cohorts of students have successfully accomplished fulltime study programs at master's level, with grades above average and less than 10% dropout. The participants boast of high learning outcomes and intensive social experiences. Establishing good online learning environments demand special competence at all levels. Professors and course writers need training in the very structured study programs and special pedagogy required for online education. Tutors must be trained in building and maintaining efficient online learning environments. Students need training and special support to function well. Administrative officers at educational institutions need the training necessary to make multilateral agreements ensuring the possibility of credit transfer and accumulation, mutual recognition of competence and interchangeability of course modules and learning objects. The challenges and problems can be formidable, but well worthwhile. The experience so far indicates that quality, competence and capacity can grow quickly in any educational institution venturing into the pedagogy of online learning.

1. ABSTRACT

Good online education can increase capacity considerably at many universities without expanding the physical campus. E-education can increase quality, improve student support systems, increase professorial flexibility and capacity and facilitate internationalisation of the curriculum and development of joint study programs. E-education can enhance learning environments through the establishment of learning communities of practice and prevent dropouts. Increased opportunities for international joint degrees, increasing ICT competence and access to ICT technology are factors that can reduce brain drain.

Many universities in developing countries lack capacity, manifested through overcrowded auditoriums and campuses, overworked lecturers/professors and brain drain. These issues in turn lead to quality concerns such as lack of recognition of competence, questionable relevance and currency of information, libraries and curricula. There is also a need for competence in the use of ICT and the ability to participate in internationalisation and multilateral joint study programs. In order to achieve the UN Millennium development goals and make it possible for poor countries to benefit from globalisation, closing the digital gap is crucial.

Online education presents new problems and challenges to professors, tutors, students, administrations and course-writers. To make a good online learning environment in a “virtual” classroom, there are various support and training needs for all involved.

During the 5-year pilot phase, the United Nations University’s Global Virtual University has gained experience in giving e-courses and study programmes at MSc level across continents and cultures, focusing on online, multicultural, collaborative learning.

2. INTRODUCTION

The days when a professor could expect to have a dialogue-lecture with 12-15 students in a classroom seem to be gone. Even in rich countries, professors must expect to lecture for big numbers of students. Small classes are unacceptable due to fiscal reasons, even if the subject is considered important. In poor countries, severe campus overcrowding is the rule. Big classes may lead to reduced quality in teaching, for students as well as the teachers, who often find repeated “monologue-lecturing” boring. Overcrowded classes give the lecturers heavy workloads, increasing the risk of “brain drain” to other countries.

"When I studied for my undergraduate degree about thirty years ago, we were 6 students in the final year class. Today, there are often about 100 plus students in the same class; at times the class may have to be broken up into two groups and when a lecturer has finished with one group of students he has to proceed to the other and deliver the same lecture". Professor Emmanuel Frempong, Kwame Nkrumah University of Science and Technology, Ghana.

Many teachers ask for good alternatives to the traditional ways of teaching. However, when people are stressed with increasing workloads, they tend to cling to known routines and avoid investing energy and money in experiments. There will therefore be ambiguous feelings about new approaches to teaching and learning.

Increasingly, people ask if technology can help, and many educational institutions consider venturing into e-learning. With the advancement of electronic communication technologies, there is also a trend of increasing cooperation in national as well as international networks¹, even between competing educational institutions (Suarez-Villa, 2004).

A World Bank report (WB 2002) suggests several measures for building knowledge societies and reducing the problem of brain drain from poor to rich countries. Among the suggested measures are increased reliance on joint degrees, purchasing ICT equipment for scholars and bridging the digital divide. Other suggestions are life-long-learning approaches, creation of international quality assurance frameworks in higher education, international recognition of qualifications and avoid sending scholars for longer sojourns of study in industrialised countries.

“... long-term graduate studies in a high-income country are likely to be vulnerable to staff defections. Evidence is mounting that shorter courses abroad are less likely to result in human capital flight”...”Strengthening the capacity of tertiary education institutions to respond flexibly to the new demands of knowledge societies will increase their contribution to poverty reduction through the long-term economic effects and the associated welfare benefits that come from sustained growth”

Some universities have found that heavy investments in ICT may not necessarily work well in education (UKeU, 2002). Lessons learned so far indicate that in addition to technology, new ways of thinking and new ways to learning are important success factors (Reeves, 2003).

“Traditional in-person teaching can be replaced by or associated with asynchronous teaching in the form of online classes that can be either scheduled or self-paced”. (There are) “several ways in which information technology could play a catalytic role in enriching the teaching and learning experience... a new pedagogical model involving active engagement of the students rather than passive reception of information, opportunities to apply new knowledge to real-life situations, representation of concepts and knowledge in multiple ways rather than with text only, learning as a collaborative activity rather than as an individual act, and an emphasis on learning processes rather than memorization of information” (WB, 2002).

There are many problems and challenges down the road. The need for training of tutors, professors and other supporting staff is increasingly urgent to avoid repeating the costly mistakes some universities have made the last 10-15 years; to find good ways of increasing educational quality for the new masses of student groups and lifelong learners while keeping costs down and maybe even find new sources of income.

2.1 The UNU-GVU and GEDS

The Global Virtual University (GVU), a branch of the United Nations University (UNU), is a consortium or network of universities cooperating as equal partners producing joint study programs within a framework of multilateral agreements. The vision of UNU-GVU is to contribute to a sustainable future with focus on developing countries, making use of the latest e-learning pedagogy and technology (*About GVU*).

¹ E.g.: The Norwegian Networked University www.nvu.no
MedNetU The Mediterranean Network of Universities
http://www.elearningeuropa.info/index.php?page=doc&doc_id=4139&doclng=5
The Global Virtual University <http://www.gvu.unu.edu/>

UNU-GVU in cooperation with partner universities, have started to develop online courses and study programmes under a programme catalogue called Global Environment and Development Studies (GEDS). Courses are structured and quality enhanced according to a standardising system developed by UNU-GVU. In August 2005, 26 students from Africa and Norway started the first Master's Study Programme in "Development Management" (DM), with the University of Agder as the academically responsible and main implementer. The programme, a four-semester full time MSc study covering 120 credits (ECTS), familiarizes students with theories and findings concerning development, and provides managerial tools to practical problems. The learning environment includes printed and multimedia material, instruction and supervision, all on the 'Fronter' Learning Management System (LMS), applying the UNU-GVU developed e-learning pedagogy. Guided by specially trained tutors, with professors more in the background as academically responsible, students engage in group work, discussions and joint assignments. Consequently, students are trained in cross-cultural communication and collaboration.

In June 2007, 24 students from Uganda, Ghana, Ethiopia, Tanzania and Norway successfully graduated from this pilot program. The dropout rate, less than 10%, has been exceptionally low for an online study programme and results have been above average according to Norwegian university standards.

The study programme has been revised by a team of course developers from universities in the mentioned countries, with the University of Ruhuna, Sri Lanka; in addition. A new cohort of students started their studies in August 2007 (E-learner # 10).

To achieve ambitious goals as described above, there is a need for training of the trainers or supporters to enable them to use the communication technology, learn about and implement pedagogy appropriate for mainly online and distance learning in multi-cultural virtual classrooms, with adult, life-long learners.

3. SUPPORTERS AND THEIR CHALLENGES

Student support can be defined as "...all activities beyond the production and delivery of course materials that assist in the progress of students in their studies." or "the organizing and management of student support including staff development" (Simpson, 2002, p.2). Seen from the learner perspective, GVU supporters include tutors, professors, administrative and technical staff.

The majority of tertiary education staff is skilled in conventional lecture-based teaching, but often lack knowledge and experience "of approaches which place student needs, choice and learning at the centre" (Latchem and Lockwood, 1998, p.xxi). Introducing online and distance learning into a conventional educational institution

"...a shift in control, with students learning through a combination of self-study and face-to-face interaction, creates uncertainties in the staff. New skills are needed (...) Staff development and support have to be provided to help staff develop the materials and learning system, redefine their role from that of a teacher to that of facilitator, respond to the ways students learn and help the students assume responsibility for their own learning" (Mar and Mak, 1998, p.97).

Below is an overview of some problems and challenges facing the supporters as experienced by UNU-GVU, and for which training is needed.

3.1 Tutors

An online tutor has similar challenges as ordinary teachers, and some in addition. Tasks done more or less unconsciously in a face-to-face classroom must be done consciously and deliberately online. Students, especially from the developing world, may "lack confidence and ability in independent study because of their experiences with an authoritarian methodology which promoted rote learning and rewarded dependent behaviour" (Randell and Bitzer, 1998, p.139). The main role of the tutor is to "guide and support the learning process by helping to link the learners to other resources and providing sufficient support to empower the learner to exercise control over his or her learning experience" (Gunawardena and Zittle, 1998, p.107). A main learning resource is peers, and tutors must ensure opportunities for interactivity and participation. "This means designing and conducting learning activities that result in engagement with the subject matter and with fellow students" (Kearsley, 2000, p.78).

Tutors need some subject knowledge (Lewis, 1995, p.245). A master's level degree in a relevant subject is usually sufficient. In addition, they need insight and training in order to handle the problems and challenges of the virtual classroom.

Problem #1. Online students are undisciplined

Even if the students have committed themselves to frequent log-ins, reality can be quite different. You cannot look your students in their eyes and instruct them, you have to communicate in writing. Online students are like most of us; they tend to dislike reading instructions. Study guides are not always read as carefully as needed. *Challenge: make progress at a pace suitable for the majority while avoiding losing those less eager to participate.*

Problem #2. You cannot yell at your students

In a face-to-face situation you can use your body language, voice tone, and scream and yell at your students, if you think that helps. If you "YELL" at your students online, they will most likely avoid reading your messages. *Challenge: Compensate for the lack of social cues and rich communication opportunities present in a face-to-face setting.*

Problem #3. Collaboration online is not intuitive

In a face-to-face situation students can discuss their subject without being conscious of that this is what they are actually doing. "How far have you come in your reading? What do you think of it?" "What did the professor say about this?" etc. This is one of the advantages of on-campus studying: the students can "negotiate meaning" in the campus café, combining it with socialising, making it pleasant. Online, this must be done deliberately and planned. "The idea that interaction must be explicitly designed in distance education courses seems a difficult concept for many instructors to accept and understand" (Kearsley, 1996, p.88). *Challenge: make online learning a social and pleasant experience.*



Collaboration online must be learned. This can be quickly done during a well-planned face-to-face session at course start-up.

Here are some of the GEDS students learning how to use the Learning Management System (LMS) at the start-up face-to-face session in Norway, September 2005.

(Photo: Aake Bjorke)

Problem #4. Infrequent on-loggers get lost

Participants logging in once a week or less, are met by a ‘sea of red flags’, indicating many unread messages. They may struggle to follow discussions going on, and others in the group may get annoyed when a member does not contribute.

Challenge: make students participate and contribute frequently in a good spirit of collaboration.

Problem #5. Students want to be taught

Traditionally, students expect to be taught, perceiving themselves as receivers more than actors. “Their desire to be taught often causes problems for the tutor... (who may) adopt a counter-role as a teacher responsible for the learning of others” (Aalto and Jalava, 1995, p.262). Lectures continue to dominate pedagogical transactions in higher education. A conspiracy has grown up between both teacher and taught to ensure that pedagogical processes are as free as possible of unpredictability, stress, openness and multiple contending voices... (students) are hardly likely actively to seek out pedagogical processes that place more responsibility upon them for their own learning (Barnett and Hallam, 1999, pp.146-147).

Many adult learners grew up in a competitive education model “where learners had to outshine one another to be successful” (Conrad and Donaldson, 2004, p.8). This is in contrast to the mainstream pedagogical approach in e-learning: the socio-cultural pedagogy, demanding active participation and interaction by the students, and where learning is defined as increasing participation (Lave and Wenger, 1991, p.15).

Challenge: “move tutors away from the traditional explicative modes of working in order to emphasize the other facilitative methods” (Simpson, 2002, p.7) and explain this in easily understandable ways.

Problem #6. Distance students tend to feel isolated, and may get de-motivated without the human touch in the technological environment

Some may feel that online learning is dehumanised and alienating; and most self-instructional courses, in spite of interactivity between learner and machine, may over time be perceived as such. Traditional didactic teaching made online may be perceived similarly: In Computer Supported Collaborative Learning (CSCL) “voice-tone, facial expression and body language which can soften the impact of hard words” (Zimmer, 1995, p.139) are missing. Due to increasing classes and limited budgets, there is a tendency towards more auditorium lecturing,

where the distance between student and professor can be even greater than in online learning. Collaborative learning depends on openness, warmth and empathy” (Zimmer, 1995, p.139). A challenge for the e-learning environment is therefore to build social presence, which means that a tutor is “perceived as a real person with genuine interest in the distance learner's needs, interest and progress” (Gunawardena and Zittle, 1998, p.108).

Challenge: develop personal and social presence and a social environment online.

Problem #7. The student is supposed to become an independent and self-reliant learner, but shall also rely on others to learn

Constructivist pedagogy strives to develop reflection and the skill of learning how to learn. “The goal of facilitating learning has been to support the development of independent learning, which ... includes a core aim that learners in effect become able to teach themselves” (Thorpe, 1995, p.176). In addition, socio-constructivist pedagogy emphasises learning by collaborative activities in a relevant context. “Positive interdependence is the knowledge that you are linked closely with others in the learning task and that success (personal and for the group) depends on each person working together to complete the task” (McConnell, 2000, p.121).

Challenge: develop a good online community of practice in a multicultural and global virtual room.

3.2 Professors

The professors in the GEDS system are the main content providers in e-course development and academically responsible for the results. The professors and course writers may team up to find creative learning tasks and activities fulfilling the course objectives and giving the planned learning outcomes. They shall support the tutors with expert advice and take a main responsibility in grading. To some extent, professors can choose their level of activity in the virtual classroom. Some prefer to leave that room to the tutors, while others enjoy taking part in the work and discussions in the online community.

Problem #1. ICT is perceived as difficult and unnecessary by many professors

Some professors boast of having ten thumbs in front of the keyboard. They may see computers as dehumanizing and unwelcome in an academic environment.

Challenge: offer appropriate and inspiring ICT training.

Problem #2. Pedagogy is often perceived as meaningless theory with no practical consequence for teaching

The traditional teacher role is "transmitting subject content, manage a group learning environment and assessing students" (Lewis, 1998, p.28). Professors refer to their long experience and claim that they do not need to learn how to teach their own subject. Many teach their students the “way they were taught and believe that they have sound reasons to say that this method has worked well” (Abdullah, 1998, p.87). Some professors are used to a mainly positivist pedagogical model, where teaching, i.e. transmission of perceived neutral, objective and correct information from the professor to his students is in focus. The current trend in higher educational institutions is a transition from the traditional positivist and behaviourist approach towards a more constructivist, learner-centred and collaborative approach (Gunawardena and Zittle, 1998, pp.105-106; and Kember, 1998, p.174). Socio-

constructivist approaches as a rule demand planning, scaffolding support and a gradually increasing participation in a community of practice. A challenge is to establish effective learning environments. According to Salmon (2002, pp.29-36), students are expected to be analytical/critical, creative and practical. Peer negotiation of meaning entails that if a professor routinely breaks in to “set things right” from the beginning, the objective of developing independent, critical and collaborating learners might not be reached. The constructivist theory of learning is that “the student is the one who constructs meaning, not the teacher who imparts it” (Kember, 1998, p.175). The transition from lecture-based teaching to online, collaborative learning is painful, going from the guru-on-the-stage to the facilitator and guide-on-the-side. Resistance against new ideas about educational methods is therefore natural and must be expected.

Challenge: Assist professors in overcoming the initial phases of resistance and instead move to exploration and commitment (Abdullah, 1998, p.88).

Problem #3. There are few if any incentives for innovation at universities

One problem in innovating open and distance learning (ODL) is that staff involved receive inadequate ‘buy-out’ time and few rewards or incentives. “Significant additions to existing workloads were common while at the same time ODL work had lower status than other kinds” (Robinson, 2001, p.17).

Challenge: Convince senior management that incentives are necessary for innovation among staff, and implement appropriate incentives.

Problem #4. Planning a well-structured course in detail, often in cooperation with others, is a process in conflict with the strongly individual and spontaneous professor, habitually being able to plan his lecture the evening before

Professors tend to be highly individual, and desire to put their personal touch on their subject discipline. Detailed and structured course planning months ahead of implementation, often in cooperation with a course development team, can be quite difficult to accept for some (Latchem & Moran, 1998, pp.68-69). Course development done by teams is preferable precisely because such a process prevents idiosyncratic excesses. Resistance can be quite severe and result in conflicts. According to Koul (1998, p.81), science teachers claim that the ‘mechanical approaches’ of instructional design might apply in humanities and social sciences, but would not work for their discipline, while humanities faculties say that focus on pluralism and creativity don’t comply with structured learning as “only live teaching transactions provide for creativity” (Koul, 1998, pp.81-82). (A comfort is that most professors later realise that it is possible to deviate even from rigorous plans.)

A challenge for professors who develop courses is to balance subject content with development of skills, harmonise learning outcomes, assessment methods and learning methods and generate appropriate feedback to students (Lewis 1998, p.26). Most professors lack training in defining learning outcomes. Shifting “policy away from control over the resources and content of education toward a focus on obtaining better outcomes” (Schleicher, 2006), can be a painful exercise.

Challenge: realise that one pedagogical approach can be more appropriate than others under differing circumstances, and that appropriate choice of pedagogy can enhance learning and prevent student drop-out.

Problem #5. The traditional “anarchist” professor tends to resist standardisation systems like the ECTS

Most EU countries are committed to the Bologna process, which involves increasing transparency, comparability, interchangeability and mobility of education and students in the EU. Some higher educational institutions outside the EU area have ambitions to adapt their systems in order to make their study programmes compatible with the institutions in the EU. A main standardisation tool is the European Credit Transfer and Accumulation System (ECTS).

Problems and resistance mainly go according to the following:

- The ECTS requires 36-40 weeks of study per year, with one semester being 18-20 weeks. Many universities traditionally have had only 12-15 weeks’ semesters.
- One semester contains an estimated 900 hours of work for an average European student. The ‘estimated student workload hour unit’, is not an exact unit, but a crucial concept in the ECTS. 24-30 student work hours correspond to 1 ECTS. In order to calculate credits, focus is on student work, not on the traditional delivery of lectures, contact hours and number of literature pages to be studied. This means that the course development tends to be modularised, focusing on learning outcomes and learner-centred approaches rather than on delivery and teacher-centred approaches. Planning e.g. four 7.5 ECTS courses totalling 900 student work hours, means that course development must be coordinated. If one course writer underestimates the number of hours required for the tasks and activities, this course will expand on the expense of the other courses. If the 7.5 ECTS course actually needs 300 hours to complete (in reality a 10 ECTS course), it “steals” 75 student hours from the other courses. Most professors tend to consider their course as the most important course. If all professors overload their courses, the student workload will exceed the 900 hours allowed, and may become unmanageable.
- At times, the semester is too short. Instead of having 20 weeks, the real number may be 15 or 16. If the courses add up to a total of 900 hours, the student workload per week may tend to become rather high.
- The ECTS requires careful planning, structuring and coordination. This adds to the professor’s workload.
- The ordinary professor has no training in learner-centred approaches, and will tend to develop courses in the instructivist, didactic way.

Challenge: Convince the professors that they need to accept, learn and implement the ECTS.

Problem #6. The professor is used to closing the auditorium door; with nobody but the students present

Some professors regard their classroom as something private, almost equivalent to the bathroom. They are reluctant to have peer academics present. Online courses are relatively open for external inspection. Professors consequently will tend to overload their online courses with information and extra books to defend their academic standing against scrutiny from other academics.

Challenge: establish procedures and standards keeping learner-centred education and reasonable workloads in focus.

Problem #7. Some professors think they practice e-learning by putting lecture notes and ppt-presentations on the electronic message board

"The mere transfer of existing text to the screen or basic competence in web-page creation are insufficient and can all too easily result in nothing more nor better than electronic page-turning exercises" (Gunn and Panko, 1998, p.216). "Professors are fired up by the idea that all the world can access their ideas, their research, their wisdom through the World Wide Web - a passion to widen access to their teaching. This is not always accompanied by a similar passion to improve the quality of their teaching" (Bates, 1996, p.6). Many professors tend to forget that a PowerPoint presentation is a tool to support the spoken word, not a lecture in itself. Poor PowerPoint presentations, with lots of words on every slide, are bad enough in a face-to-face auditorium lecture, but there the professor can at least support the slides with a good verbal performance. PowerPoint presentations put online by a professor without special training and skills are as a rule not worth reading. A lecture put up on the screen is just an attempt at transmission of information. Without appropriate learning activity associated with the lecture, learning is not very likely to take place.

Challenge: in addition to technical skills, professors need pedagogical skills to function as e-course developers and contributors in the virtual classroom.

Problem #8. Pacing a course by giving time-frames for activities and cut-off dates for hand-ins are often contrary to on-campus traditions as well as traditional distance education

In collaborative studies, learning activities must to some extent be synchronised. The participants do not have to be present during the same hours, not even the same day. But they must participate frequently during the activity's time-frame to be recognized as participants in the community of practice. Most professors are used to plan progression by their own lectures, not by their students' activities. To the traditional distance education institution, pacing a group progress is contrary to the philosophy of the studying anytime, anywhere and at the student's own pace.

Challenge: Calculating the correct time needed for the different learning activities; balancing amount of content with the time needed for group discussions and the 'ECTS hours' available in the module.

3.3 Senior managers

Problem #1. Universities have been run roughly the same way the last thousand years. Change does not come easily

Educational institutions need to adapt to changes, "in particular through developing the capacities of their staff, (focusing) on the development of skills around the use of the internet and how this process is in itself a means of developing a learning organisation" (Forster and Hewson, 1998, p.221). In addition to technical knowledge, senior management need to understand the basics of ODL, in particular that staff needs training to master technology as well as to practice pedagogy.

Management should not take pedagogical skills for granted. Too often, "teaching competence is something which is assumed, a private matter in which the individual academic relates to a large or a small group of students, without any peer judgement of the efficacy or otherwise of

the interaction" (Stewart, 1998, p.148). Most academics have endured lectures held by professors with little or no pedagogical insight.

Challenge: Encourage senior management to adopt new technologies and ideas, and give appropriate support to staff in doing the same.

Problem #2. Some senior managers have little or no experience in international, multilateral cooperation

When the university aims at cooperating with other universities, especially with universities on other continents, the formalities and practicalities can be quite daunting. International cooperation is one of the UNU-GVU trademarks, and this will necessarily bring new concerns to management. The UNU-GVU experience so far corresponds to: "where innovation involved collaboration, the workload and difficulties of working with partners, especially overseas, were underestimated. Problems stemmed from lack of clear agreements or contracts and weak definition of roles, responsibilities and time-schedules" (Robinson, 2001, p.18). The UNU-GVU has developed a charter that all participating partners have to sign. Additional guidelines, standards and a quality enhancement system for multilateral course development and course implementation have been developed. However, making this an ongoing process that takes the documents through iterative steps of actual implementation, can be quite tricky.

Challenge: Develop efficient forms of communication and rapport between senior management in the cooperating institutions, avoid prestige issues, and develop good standard cooperation agreements and common, standardised guidelines for course development and implementation. All these factors are crucial in order to achieve the mutual recognition of competence needed in a network of collaborating educational institutions.

Problem #3. Senior managers tend to see distance education as a cheap solution, and fail to give teachers extra resources

It is unfortunate when innovative professors starting up online classes are instructed by their dean to take on another on-campus class, since "the other students are online, managing themselves". According to Robinson (1998, p.35) the administration needs to protect participants from job demands, show an interest in the training and ensure adequate facilities. Senior managers thus have "a critical role in aligning staff development with strategic goals" (Robinson, 1998, p.34).

Challenge: demonstrate that learner-centred, collaborative learning needs quite intensive personal guidance and extra resources, and that student support is decisive for a good learning environment.

Problem # 4. Senior management prefers spending resources on other fields than staff development

Gordon Stanley, chair of Australian Higher education observes that "there is a paradox in that universities, established to transform the mind and preserve and extend knowledge, do not always apply intellectual rigour to their own processes of institutional development" (Latchem and Moran, 1998, p.66). Staff development should be at the core to develop management and improve teaching and curriculum design, he argues. Completion rates in ODL have been lower than for traditional on-campus institutions. Responses have been more funds to "staff development, more and better support services, and regional networks" (Ross, 1998, p.18).

Challenge: Convince senior management that their institution should become a learning one, and allocation of appropriate financial resources is necessary.

3.4 The LMS technologists

Problem: The medium is not the message

The technologists developing and maintaining the user interface of the Learning Management System (LMS), may have excellent knowledge and skills related to Information and Communication Technology (ICT). However, people developing learning technologies should also have some insight in pedagogical needs. McLuhan stated (1967) that “the medium is the message”, and this might be true when entertaining people. However, when education, learning, deeper understanding, concrete learning outcomes and collaborative negotiation of meaning are the objectives, the medium only is insufficient. The technology should become “black-boxed” and transparent; an important tool that functions well without participants using much time on technology itself.

Challenge: pedagogy must take the lead, while technology responds to the pedagogical needs. The LMS technologists therefore need basic pedagogical training.

3.5 The authorities

Problem: State institutions are conservative, and will resist change

Higher officials in ministries have traditional university education. Very few if any have personal experience of modern online education. Some have notions of online education as old-fashioned correspondence courses by e-mail, others perceive e-learning as giving access to lecture notes or interactive, self-instructional, game-like courses. Some will indignantly refuse to believe that online and distance education can be of the same quality or even better than traditional on-campus full-time education. The authorities may concede that online education will be an important component in future education. They therefore willingly support projects and experiments, but may hesitate in establishing programs that are more permanent. Some may perceive internationalisation of education as a threat to national control. Many ministries run prestigious scholarship funds bringing students from developing countries to Europe for studies. E-education may be detrimental to the prestige of such funds and thereby jeopardise a good source of income to many educational institutions.

Challenge: Communicate well enough to convince authorities that online education is worthy of support further than a time-limited experimental project.

4. TRAINING NEEDS

The training needs are those listed as “challenges” in section 3 of this paper. Of major importance are “learner-centred instruction; interaction; social presence; and collaborative learning” (Gunawardena and Zittle, 1998, p.106).

The tutors will need a basic course in online tutoring, and support from an experienced lead tutor functioning as a mentor. The professors usually need training in ICT, the use of an LMS, in pedagogy and e-course development. The management often needs basic training in online

Sven Åke Björke
Challenges and training needs of E-supporters

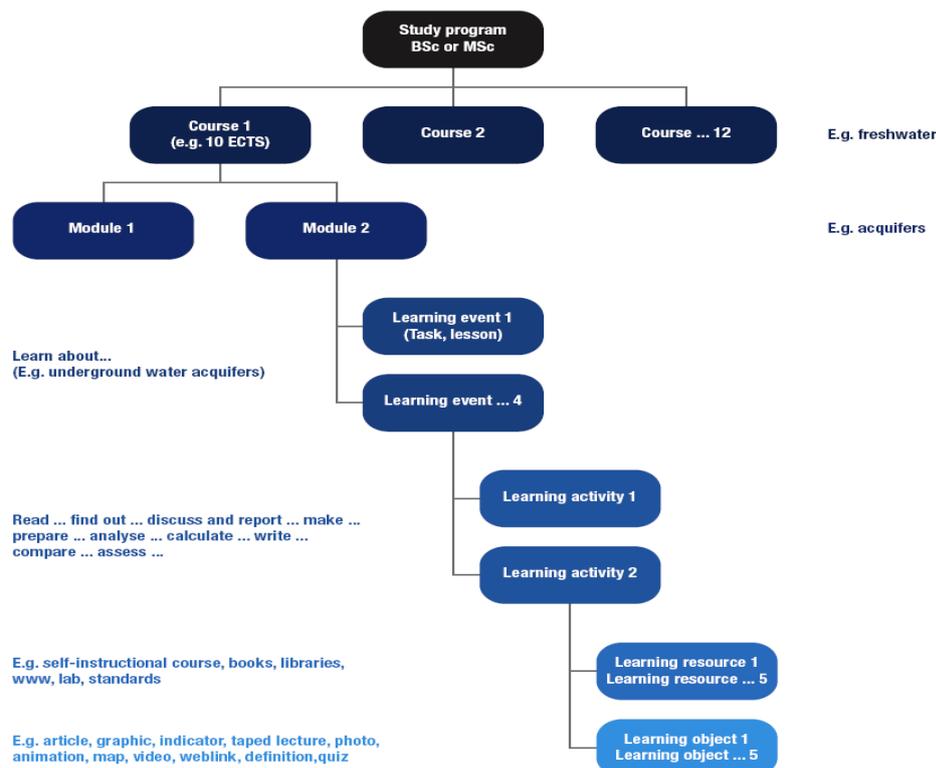
12/18

pedagogy, e-course development according to standards and guidelines, internationalisation of education, mutual recognition of competence, quality assurance and making appropriate multilateral agreements with cooperating partners.

The UNU-GVU systems for course structures, course description, quality enhancement and audit system ensure that the quality criteria according to the ECTS are met while also adapting the course to an online or blended environment. The UNU-GVU system does not interfere with content, but gives the course development a structuring procedure to follow.

Several training needs can be met at a basic level by the “E-teaching” courses offered by the UNU-GVU in collaboration with the Stord-Haugesund University College and the University of Agder in Norway. The study guide provides the participants with detailed goals, tasks, activities, pacing in the form of timeframes and cut-off dates, and a library of online learning resources with videotaped lectures, articles and website collections giving participants some degree of autonomy and self-determination. Tutors are guiding and facilitating. However, the most important learning resource is the participants themselves.

The target group is educators in general, lecturers, professors, developers of learning environments, subject professionals, to whom e-learning is new.



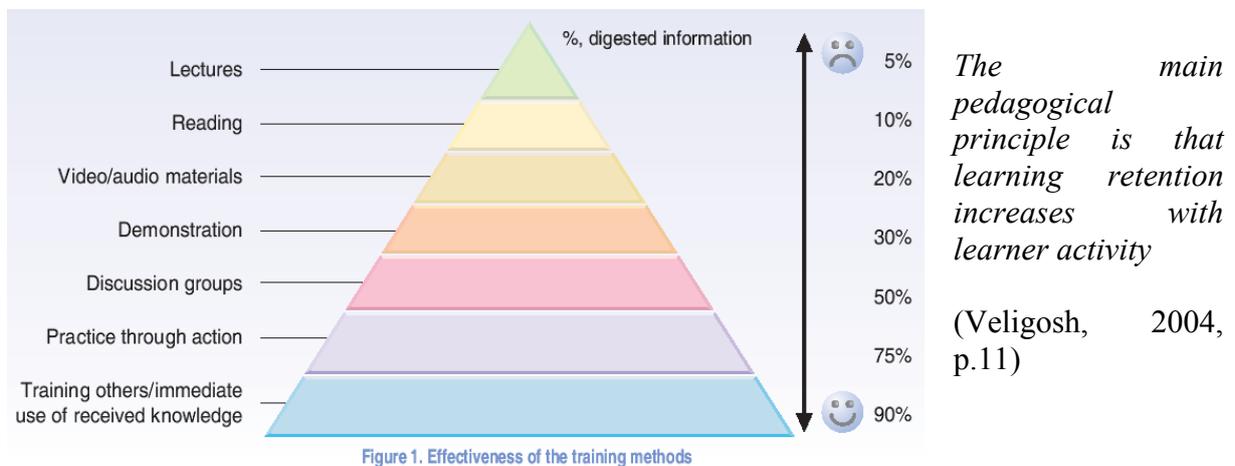
The GVU study programme and course structure

Pedagogical planning of learning as activities

The philosophy is that learning takes place when the learner is active. When the task is to learn e.g. about “the environmental issue of invasive species”, it is considered insufficient just to read about the subject in a book or two. The student must of course read, search for

alternative information and try to formulate own opinions. In addition, the student should confront his or her understanding with that of peers in online discussions. The student will thereby read several ways of presenting the issue, and quickly find that there is no “facit”, but that it is necessary critically to build a broader, more multi-faceted understanding in collaboration with others. In this way, much of the information gathering, arguing, thinking and reasoning take place in online discussion fora, where the student must apply the information found in ongoing discussions. This means information is used and thereby learned, according to the lowest and broadest step on the learning pyramid.

The online discussions are intended to rationalise production of concrete results, and thus connected to and act as a basis for the writing of articles and hand-ins, whether this is done by the group or individually. Students who participate actively in the discussions find that their understanding of the issue, their ability to form critical standpoints and their ability to express opinions instead of just repeating a source will be considerably strengthened.



5. CONCLUSION

New communication technologies can be used to transform staff development, making good learning environments and creating communities of practice in dual-mode or purely online modes. Universities should be good places to learn; face-to-face, online or in combinations, and in addition develop the institutions into good learning organisations.

Internationalised online education is a specialised field of expertise, and building competence is necessary in the fields of ICT, e-pedagogy, frameworks for international quality assurance, credit accumulation and transfer, cross-cultural communication and understanding.

A full time study programme is ambitious in itself. Asking the students to study mainly online, taking an MSc degree over two years, is challenging. Considering that online studies can be tough enough in Europe, they will be even tougher in Africa south of Sahara. With frequent electricity breakdowns and poor Internet connections, the margins are narrow. Asking small groups of students associated to the local universities to meet frequently, may be a remedy to some extent. However, there must be no doubt that the tutors' role is decisive. To support and motivate the tutors and students, occasional face-to-face sessions can be good vitamin injections. The tutors and professors may also meet physically at least once per semester. Providing tutors as well as course-writing professors and others involved in the

online studies with the necessary training and support must always be a main task for the administration of such initiatives. Above all, sufficient time for the task is necessary.

Globalisation processes without doubt challenge the education systems in all countries, not only in Africa:

”European school systems must learn to be more flexible and effective in improving learning outcomes.”...” if Europe wants to retain its competitive edge at the top of the global value-added chain, the education system must be made more flexible, more effective and more easily accessible to a wider range of people” (Schleicher 2006).

Internationalised online education and collaboration in networks can be important driving forces for developing modern and flexible education adapted for lifelong learning. A well functioning network of equal partners facilitates development of high-quality courses and study programmes ensuring currency, relevance and a broad curriculum catalogue.

There are high expectations to the educational systems everywhere. In order to encourage and enable educational institutions to build knowledge-rich, good learning environments and take responsibility for the learning outcomes, readily accessible and extensive support systems are necessary.

References

AALTO, P. and JALAVA, M. (1995) ‘Implementing experiences from small-scale courses to large education systems, in Lockwood, F. (ed.): *Open and distance learning today*, Routledge, London.

ABDULLAH, S. (1998) Helping faculty to make the paradigm shift from on-campus teaching to distance education at the Institute Teknologi Mara, Malaysia, in Latchem, C. and Lockwood, F. (Eds.) *Staff development in open and flexible learning*, London, Routledge.

BARNETT, R. and HALLAM, S. (1999) Teaching for supercomplexity: A pedagogy for higher education, in Mortimore, P. (ed.): *Understanding pedagogy and its impact on learning*, London, Paul Chapman Publishing.

BATES, A.W. (1996) The impact of technological change on open and distance learning, keynote presentation, *Open learning: your future Depends on it*, Queensland Open Learning Network Conference, Brisbane, Australia.

CONRAD, R. and DONALDSON, J. A. (2004) *Engaging the online learner. Activities and resources for creative instruction*, Jossey-Bass guides to online teaching and learning, volume 1, San Francisco, Wiley.

E-LEARNER # 10 (2007) Low dropout and above average grades in first online MSc Development Management study programme, <http://www.gvu.unu.edu/news.cfm> Accessed 20.02.08

FORSTER, A. and HEWSON, L. (1998) Universities learning. The lure of the Net, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.

About Gvu, 2003-2005, <http://www.gvu.unu.edu/about.cfm> Accessed 19.03.07

GUNAWARDENA, C. N. and ZITTLE, R. H. (1998) Faculty development programmes in distance education in American higher education, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.

- GUNN, C. and PANKO, M. (1998) Staff development within a flexible and open learning course, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- KEMBER, D. (1998) Staff development from an action research perspective, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- KEARSLEY, G. (1996) The nature and value of interaction in distance learning, in Beaudoin, M. F. (Ed), *Distance Education Symposium 3: Instruction*, ACSDE Research Monograph, No 12, University Park, PA, Pennsylvania State University.
- KEARSLEY, G. (2000) *Online education: Learning and teaching in cyberspace*, Belmont, CA, Wadsworth/Thomson Learning
- KOUL, B. N. (1998) Proactive staff development. The Indira Gandhi National Open University experience, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- LATCHEM, C. and LOCKWOOD, F. (1998) *Staff Development in Open and Flexible Learning*, London, Routledge.
- LATCHEM, C. and MORAN, L. (1998) Staff development issues in dual-mode institutions, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- LAVE, J. and WENGER, E. (1991) *Situated Learning: Legitimate peripheral participation*, Cambridge University Press, Cambridge.
- LEWIS, R. (1995) 'Support for the in-company learner', in Lockwood, F. (ed.) *Open and distance learning today*, London, Routledge
- LEWIS, R. (1998) Staff development in conventional institutions moving towards open learning, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- MAR, H. and MAK, D. (1998) Staff development in open learning at the Hong Kong Polytechnic University, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- MCCONNELL, D. (2000) *Implementing Computer Supported Cooperative Learning*, London, Kogan
- MCLUHAN, H.M. (1967) *The medium is the Message: An inventory of Effects*, New York, Random House.
- RANDELL, C. and BITZER, E. (1998) Staff development in support of effective learning in South African distance education, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- REEVES, T. (2003) *Evaluating what really matters in computer-based education*, University of Georgia, <http://www.educationau.edu.au/jahia/Jahia/pid/179> accessed 10.02.08
- ROBINSON, B. (1998) A strategic perspective on staff development of open and distance learning, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.

- ROBINSON, B. (2001) 'Innovation in open and distance learning: some lessons from experience and research', in Lockwood, F. and Gooley, A. (eds.) *Innovation in Open and Distance Learning. Successful Development of Online and Web-based Learning*, London, Kogan.
- ROSS, P. (1998) Informing government and institutional leaders about the potentials and pitfalls of open learning, in Latchem, C. and Lockwood, F. (eds.) *Staff development in open and flexible learning*, London, Routledge.
- SALMON, G. (2002) *E-tivities. The key to online learning*, London, RoutledgeFalmer
- SCHLEICHER, A. (2006) *The economics of knowledge: Why education is key for Europe's success*. The Lisbon Council policy brief, <http://www.naider.com/ateneo/articuloVentana.asp?id=220> Accessed 10.02.08
- SIMPSON, O. (2002) *Supporting Students in Online, Open and Distance Learning*, London, Kogan
- SUARES-VILLA, L. (2004) *The role of networks*, <http://www.technocapitalism.com/applet/networks.htm> accessed 10.02.08
- THORPE, M. (1995) 'The challenge facing course design', in Lockwood, F. (ed.) *Open and distance learning today*, London, Routledge
- UKeU (2002) *Principles and practice in electronic courseware design*, UK eUniversities Worldwide Limited, London, UK, <http://whitepapers.silicon.com/0,39024759,60132472p-39000573q,00.htm> , Accessed 10.02.08
- VELIGOSH, E. (2004) *Developing and delivering training on the Aarhus convention for civil society*, European Commission http://www.rec.org/REC/Programs/PublicParticipation/PublicAwareness/pdf/TMs_Eng_CS.pdf Accessed 14 February 2008
- WORLD BANK (2002) *Constructing Knowledge Societies: New Challenges for Tertiary Education*. A World Bank Report, <http://www1.worldbank.org/education/pdf/Tertiary%20Education%20Paper%204-10.pdf> , Accessed 10.02.08
- ZIMMER, B. (1995) The empathy templates. A way to support collaborative learning, in Lockwood, F. (ed.) *Open and distance learning today*, London, Routledge

Biographical notes

Sven Åke Bjørke works as an e-convenor and e-course developer at the United Nations University's Global Virtual University, and as assistant professor at Centre for Development Studies, University of Agder. He has been information manager at UNEP-GRID-Arendal since 1994. He is educated as a lawyer, jurist-linguist and science teacher. He has a MA degree in online and distance education from the Open University, UK. He has spent several years working in developing countries, and has previously published articles related to globalisation of education and competence and capacity building as tools for achieving sustainable development. Bjørke was awarded the Norwegian TISIP award 2008 for outstanding innovation in online pedagogy.

Contact details

Sven Ake BJORKE
UNEP/GRID-Arendal
UN House
N-4804 Arendal, Norway

Sven Ake Bjoerke
United Nations University/ Global Virtual University
Development Manager
<http://www.gvu.unu.edu/>
UNEP/GRID-Arendal
Information Officer
<http://www.grida.no>
Agder University College
Asst. professor
<http://www.hia.no/no/content/view/full/5451>
Phone: +47 92 04 76 26
Fax: +47 37 03 50 50
E-mail: aake.bjoerke@grida.no
URL: <http://www.grida.no/about.cfm?pageID=8&groupID=2&staffID=6>