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mENU - model for a European, Networked University

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Abstract

The idea of developing a model for a European Networked University (mENU) originates from an initiative taken by the European Commission in 2001 aiming at mobilizing existing resources for designing tomorrow's education. As part of this program, a group of eleven European universities have created an ENU model, based on experiences and results from previous projects and research & development work.

The partners defined models for collaboration (partnership agreement), for joint study plans, organization and economic strategy, which were tested and evaluated through user trials. Based on these building blocks, the model for establishing a sustainable ENU - a European Networked University is presented in this article.

Keywords: International WBE; Online degree programs, Joint Study Programs; Collaboration.

Background

New technology and global networks give students opportunities to study where and when they want. E-learning indicates a paradigm shift in higher education, where the days of one provider of knowledge and once-in-a-lifetime education are obsolete. The shift forces traditional, higher educational institutions to rethink their methods, pedagogy and organizational systems. This requires new approaches to higher education, where collaboration, networks and joint efforts are crucial. Internet is the backbone for practical solutions. This in return, invites for collaboration and exchange of knowledge, expertise, material, and study programs.

Buzzwords like *e-learning*, *academic mobility*, *student flexibility* and *life-long learning* represent complex areas of organizational, economic, technical and pedagogical changes. Previous changes have been enforced and accepted gradually as educators and learners have adapted to the new ideas. The new challenge now is the speed and the multiplicity at which the new strategies are being introduced and spread around the world.

The European situation

Obstacles like language barriers, strong national traditions and regulations, and complex routines for exchange of academic credits and grades between institutions represent extra challenges to joint international prospects. Mass education and joint study programs across boarders are still at an early stage.

Direct exchange of courses and course material, acceptance of credits and exams are complex matters. Since the production of net-based learning material is rather time and resource consuming, much effort can be saved by close collaboration between institutions and staff members with common interests. Former projects have shown rather promising results here, proving that it is really possible to collaborate in this field. There may be more to gain by collaboration than by competition.

Through different initiatives and projects over the past 6 - 8 years there has been a gradual evolvement of goals and results.

Political directions

On June 19, 1999, twenty-nine European Ministers in charge of higher education signed in Bologna a Declaration on establishing a uniform European area of higher education by 2010 and promoting the European System of higher education worldwide. The Ministers affirmed in the Bologna Declaration (http://www.eua.be/eua/en/policy_bologna.jsp) their intention to:

- Adopt a system of easily readable and comparable degrees (Diploma Supplement)
- Adopt a system with two main cycles (undergraduate/graduate)
- Establish a system of credits (such as ECTS)
- Promote mobility by overcoming obstacles
- Promote European co-operation in quality assurance
- Promote European dimensions in higher education

Two years later it was followed by the *Prague Communiqué* where the Ministers reaffirmed their commitment to the objectives of the Bologna Declaration, appreciated the active involvement of the European University Association (http://www.eua.be/eua/) and the National Unions of Students in Europe (http://www.esib.org/BPC/welcome.html), took note of the constructive assistance of the European Commission, and made comments on the further process with regard to the different objectives of the Bologna Declaration. They further emphasized as important elements of the European Higher Education Area:

- Lifelong learning
- Involvement of students
- Enhancing the attractiveness and competitiveness of the European Higher Education Area to other parts of the world (including the aspect of transnational education)

In September 2003, in the *Berlin Communiqué*, the Ministers reaffirmed the social dimension of the Bologna Process. Here the Ministers added two additional actions:

- European Higher Education Area and European Research Area – two pillars of the knowledge based society, promoting closer links to develop a Europe of Knowledge

- Stocktaking to provide reliable information on how progress is actually advancing, especially in relation to: quality assurance, two-cycle system and recognition of degrees and periods of studies

The e-learning initiative

European Commission's e-Learning Action Plan (Commission of the European Communities, 2001) is an action to boost the change from traditional education to systematic applications of ICT for the provision of flexible learning and competence building - *Designing tomorrow's education,* as the Commission says.

In its resolution of July 2001 the Council of the EU (Council of the European Union, 2001a) invited the member states to 16 different actions, and also urged the EU Commission to "continue supporting existing European portals and to encourage the development of other portals to facilitate access to educational content and to promote collaboration and exchange of experiences in the area of e-Learning and pedagogical development, especially with a view to:

- Support trans-national virtual meeting places
- Stimulate European networking at all levels and in this context establish and provide networks for the benefit of teacher training,
- Support directories of existing quality Internet resources"

Under the initiative the Commission issued a call for proposals (Council of the European Union, 2001b) with focus on e-learning and virtual European universities, based on partnerships and cooperation with other universities, and for European degrees combining courses and materials from different universities.

The mENU project

Eleven partners in 7 countries who tried to implement some of the ideas behind this call initiated the project. The project proposed to meet some of the targets outlined by the eLearning initiative. To comply with the defined goals for the project, tasks were divided into smaller parts, work packages, with a responsible leader for each part. First a series of background material was analyzed and organized into separate plans for strategy, business, organization, studies and quality assurance etc. Next some of the practical challenges were tested in two master degree programs. Ask and Haugen (2004a), performed an evaluation and the final model is now presented in a report. Staff members from the partner institutions have worked conscientiously over a period of two years, bringing their ideas and varied experiences into the final products.

Outcome of the project - the model

Based on previous experiences and the work done in the mENU project, the partners have agreed to present the following model for a European Networked University for eLearning (Hjeltnes et al., 2004).

Strategy for ENU

ENU aims at taking a portion of the emerging e-learning market, which complements and adds value to the conventional educational and training institutions. Thus, ENU is not in competition with these institutions. ENU should be regarded as a well defined as a virtual network of existing universities that agree to collaborate in the provision of graduate degree programs and lifelong learning by sharing, exchanging or adapting on-line courses. ENU should not be a legal entity, but it provides the framework for the collaboration of institutions for joint creation and provision of e-learning programs of study.

The target group of ENU is postgraduate students and lifelong learners. Since ENU is not a legal entity, it will not grant degrees, certificates, or diplomas. The "host" university, i.e. the partner university that is in charge of the actual program, will grant these.

Principal ENU goals

The primary goals of ENU may be expressed as follows:

- To enrich the portfolio of the programs offered by the ENU institutions today. New programs will be collaboratively designed, directed and delivered within ENU. All programs will use human resources and learning content from ENU institutions
- To fulfill a demand that exists in the market for programs covering new topics due to technological and cultural evolution, or not available yet due to lack of human and other recourses at a single university
- To guarantee high quality of the ENU programs through pooling of ENU resources, instructors, course material etc. and a strict control applied to each program following a Quality Assurance System (QAS)

In order to obtain these goals several measures must be taken.

Organization

Organization of the network to master the challenges of the strategy has been proposed in the following manner.

Certain organizational entities are outlined

a. ENU should have a Board with members at institutional level to ensure the anchoring of ENU in each partner institution, to have access to recourses in the institution, and to bring political power to ENU.
b. A Board Working Group should be appointed as a sub-group among the Board members,

consisting of people who are specialists in one or more tasks related to the operation of a virtual university.

c. The ENU Secretariat could be hosted by one of the legal institutions, or the services could be bought externally, for the daily operation of ENU. The size of the secretariat will depend on the finances of ENU, but should be kept at a minimum.

d. An Administrative Group will work on overcoming differences between administrative systems and practice in the institutions. There could also be an Academic Group, taking care of quality assurance, and development of new curricula. Additionally, a Research Team is necessary to work on questions related to the use of ICT in education.

An agreement between the institutions collaborating in the ENU must be established and signed, stating the role of the ENU both as a virtual and as a physical organization. An example of such an agreement is found attached to the organizational plan for the ENU (Hjeltnes et al., 2003).

Offering distance e-learning courses need both a pedagogical and a technical platform. The ENU will not enforce particular pedagogical approaches or a common learning management system (LMS). The ENU consists of several institutions with different traditions in teaching and e-learning. Still there needs to be plans and provisions for services to the public, the users, internal services, technical services, and measures for security.

Committees or task groups may be set up for particular purposes like pedagogical methods, marketing of ENU programs, business strategies, and in particular a forum for information and discussions about e-learning standards (e-learning environments, LMS, learning units etc.)

Study programs and courses

In order for collaboration between institutions to take place, it was necessary to develop a joint approach to the description of programs and courses in order to have a common working language, before designing the template. An explanation of the key terms used, are as follows:

- A *study program* consists of a number of *courses,* and awards a formal qualification or degree
- A *course* can be part of more than one *program,* and awards credits
- A *course* is made up of a number of *modules* or *study blocks*
- A *module* or a *study block* can be part of more than one course
- A *module* or a *study block* consists of a number of *learning objects*
- A *learning object* can be used within more than one *module* or *study block*

mENU adapted the structure from the first two levels as a starting point for designing a demon-strator that tests courses from two different study programs. A major goal for the ENU should be to develop joint degree programs that are internationally accepted and recognized.

Quality of studies

Students and society demand educational systems of high quality - the students because they spend time and money for the education, and the society because educational quality is the best insurance for future welfare. Reasons for implementing a comprehensive quality assurance

system (QAS) stem from the competition with a growing number of institutions offering courses through the internet, and that institutions all over Europe are urged to offer joint study programs. A QAS that can be applied and accepted across all partner institutions is of particular importance. This must define parameters and assessment methods for several factors, like administrative systems, study programs, courses, staff qualifications, student assessment and qualifications (Ask & Haugen, 2004b).

ECTS-NL

The European Credit Transfer System (ECTS) is appropriate for the creation of transparency of the study programs, for "building bridges" between institutions and widening the choices available to students. The system makes it easier for institutions to recognize learning achievements of students through the use of commonly understood measurements - credits and grades - and it also provides means to interpret national systems of higher education. But it needs adaptation in order to accommodate procedures related to the net based learning (NL) nature of study programs.

Utilizing a ECTS-NL enhances flexibility, cooperation and sustainability of dynamic study programs. Clear advantages here can be stated as follows (Stamatis & Kargidis, 2004).

- *Standardization*: Those designing a course or a module know in advance the exact amount of workload the total course shall have, and are guided in implementing it with a set of learning objects
- *Flexibility*: It is very easy to develop interchangeable courses and modules that can be assembled, disassembled and re-used easily
- *Distributed development of courses* and *modules*: More than one institution can collaborate for the design, development and delivery of a study program, a course or even a module
- *Adaptability*: a course or a module can be localized to diverse student populations or special target groups

Technological systems & learning environment

Through previous national and international projects the policy has been to stick to general, open systems instead of committing the group to proprietary systems. This may cause some delays and extra difficulties in production and distribution. But on the other hand, it will avoid compatibility problems, extra costs and installation procedures for the users. As far as possible one should stick to internationally recognized standards for e-learning.

The first attempts to create Open and Distance learning (ODL), were clearly colored by traditions from paper based distance education and by lectures in classrooms. Expressions like *virtual classrooms*; fixed *schedules* with *lessons* and *assignments* are clear reminiscences of classical universities and correspondence schools. Building on solid traditions might not exploit the full potential of the technology and the possibilities for improving the learning environment. The ENU is intended to combine well-established principles with innovative and visionary pedagogical methods.

The learning environment tool should provide four main arenas (Staupe & Hage, 2004).

1. **Presentation-/lecture area** for text files, web sites, overheads, video, animation etc.
2. **Working area** with software tools, word processor, group-ware, workbook/portfolio etc.
3. **Knowledge-area** with oracles & help services, a FAQ-base, library services via Internet etc.
4. **Private area** for private files, a database, workbook, personal work-study plan etc.

A communication environment is an integrated part of all this. The model is designed to follow the principles of an open learning environment.

Economy

ENU is a consortium administrated at the location of one of the ENU partners. Even if the experiences of models with rotating administration are not ideal, this can be a realistic implementation. Basic principles for the economy are outlined in the ENU business plan (Temperini et al., 2004).

Funding

The financing sources for the ENU work consist basically of the following sources:

- Annual remunerations, i.e. annual fees paid for the participation in the ENU network; may be paid as service fees between the partners etc.
- Membership fees on an annual basis
- Public subsidies from governments, EU projects, national/regional projects etc.
- Revenues from brokerage and fees, generated income, partially channeled back to the partners for their courses and services
- Other income, e.g. specific infrastructure project funds

One of the motives for joining the ENU is to offer courses for a larger market, also outside Europe, and perhaps increased revenue.

Costs/expenditures

This will consist of e.g. board costs, board working group costs, the ENU secretariat which includes

- Personnel costs; leader, study administrator, technical support etc.
- Office costs
- Operational costs

Further on there will be development costs, where each institution is responsible for its own courses. Each institution must therefore cover these costs.

Concluding remarks

Within the framework of the mENU project we developed a lot of tools to construct an ENU. To some extent the tools have been used to create a demonstrator i.e. master programs and courses. The programs are still running with students from around the World and with courses delivered by several institutions. Testing is thus at an early stage.

The maturity within the institutions, regarding the use of ICT in education, implementation of ECTS and the willingness to create courses to be used over the Internet, varies considerably.

Nevertheless, in the process of designing tomorrow's education and to foster the European dimension, we believe that virtual European universities, based on partnership and cooperation with other universities represent a possible way to move forward. In this paper we outlined some of the main principles for a loose network model to create an ENU. The mENU team believes that a network across borders will strengthen the European dimension as compared to nationally based virtual universities. More details and background for the model can be found at the menu web site (http://ans.hsh.no/lu/inf/menu/documents.htm). We hope that the work of the mENU team will be of benefit to the community and to institutions that embark on the development of a collaborative, virtual university.

If successful, this organization will promote virtual mobility of students, academic staff and highly skilled experts. This will also prepare the grounds for mutual and international recognition of academic standards, credits and competences. Hopefully it will help overcoming barriers of language, cultural and political differences, and academic pride related to availability and acceptance of higher education. This is in accordance with the EU educational policy, but may be applicable far beyond Europe.

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