



InnoUniLearning

The Fostering of Innovative eLearning Strategies in Higher Education

Noteworthy eLearning Programmes Report

Interview Benchmark Process – Highlighted 8 eLearning Programmes



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ABBREVIATIONS

CDE	Centre for Distance Education
CETLs	Centers of Excellence in Teaching and Learning
CETADL	Centre for Educational Technology and Distance Learning
CMS	Content Management System
CSS	Cascading Style Sheets
ECDL	European Computer Driving License
ECTS	European Credit Transfer System
EDEN	European Distance and eLearning Network
ELDT	eLearning Development Team
EPICT	European Pedagogical ICT License
FAQ	Frequently Asked Questions
FE	Further Education
HE	Higher Education
HEI(s)	Higher Education Institution(s)
IMS –LD	Instructional Management Systems – Learning Design
ICT	Information Communication Technologies
IP	Internet Protocol
LDU	Learning Development Unit
LMS / LCMS	Learning (Content) Management System
MLE	Managed Learning Environment
ODL	Open Distance Learning
PLE	Personal Learning Environment
QAA	Quality Assurance Agency (in the UK)
SMS	Short Messaging Service
SPI	Sociedade Portuguesa de Inovação
VLE	Virtual Learning Environments
W3C	World Wide Web Consortium
WiFi	Wireless Fidelity
(W)LAN	(Wireless) Local Area Network
XHTML	Extensible Hyper Text Markup Language

1. INTRODUCTION

InnoUniLearning is supported by the European Commission to foster and disseminate innovative eLearning¹ strategies in Higher Education. The focus of this project is:

- To conduct a study on the eLearning strategies applied by ‘Higher Education Institutions’ (HEIs) within France, the United Kingdom, Hungary, Austria and Portugal;
- To encourage the up-take of eLearning programmes within HEIs across Europe through the dissemination of successful eLearning case studies that support effective practices in higher education.
- To understand the enabling factors both from a methodological and technical point of view in order to create workable and successful eLearning Programmes.

The dissemination and promotion activities are designed to exploit the project results within the European community. A focus is placed on dissemination to the European community Higher Education Institutions that are interested in implementing or improving their eLearning programmes.

This document, *Noteworthy eLearning Programmes Report – Part II*, presents the results of a comprehensive review of 25 HEIs with regard to the noteworthiness of their eLearning programmes. It is important to mention that within Part I of the Noteworthy eLearning Programmes Report, the review of the 25 HEIs was partially covered. Within this document, individual programme summaries are presented to provide an overview of the institutions, their education structure, curriculum needs, and eLearning development and strategy.

The Noteworthy eLearning Programmes Report provides the education community an extended resource of evaluated higher education eLearning programmes. Although not as detailed as the eLearning Strategy Study², this report discusses more programmes across a greater number of cultures. The document will be disseminated via the project website, virtual conferences and an emailing supported by related networks.

¹ eLearning is defined as “the use of new multimedia technologies and the Internet to improve quality of learning by facilitating access to resources and sources as well as remote exchanges and collaboration.” (Communication from the Commission to the Council and the European Parliament, The eLearning Action Plan, Designing tomorrow’s education, Brussels, March 28, 2001)

² The eLearning Strategy Study will be conducted subsequent to the individual review process.

2. INTERVIEW BENCHMARK PROCESS - HIGHLIGHTED 25 ELEARNING PROGRAMMES

2.1. Introduction

The individual review process consisted of:

- Contacting the highlighted 25 HEIs requesting their participation with regard to a telephone interview.
- Reviewing telephone interview responses and prioritizing institutions based on developed criteria.
- Developing individual summaries for the 25 HEIs eLearning programmes.
- Selecting 8 HEIs from the project results to date.
- Confirming the approach with an Advisory Panel.

The review process assured the selected 8 HEI eLearning programme case studies are based on a range of higher education institutions that represent various cultures and education systems across Europe.

As presented later in this chapter, a specific methodology was developed to conduct the interview benchmark review. The methodology was based on a telephone interview benchmark survey. Each project partner was responsible for conducting the survey of the HEIs of their country. The telephone interview survey results and information collected during this project phase and earlier phases were utilized in the selection of the highlighted 8 HEI eLearning programmes.

2.2. Methodology

2.2.1. Telephone Interview Benchmark Survey

A telephone interview benchmark survey was conducted (please refer to Annex 1 – Telephone Interview Benchmark Survey). The objective of the survey was to assist in the selection of the highlighted 8 eLearning programmes. The methodology used in this individual review process was discussed by the project partners during the second project meeting in Paris.

The methodology used in the survey was based on the study “Quality on the Line – Benchmarks for Success in Internet Based Distance Education”. The benchmarking methodology was developed by the United States’ Institute for Higher Education Policy (2000), and intended to provide a measure of quality in relation to eLearning. The Benchmarks consisted of six different categories:

1. Course/programme Development
2. Teaching and Learning
3. Course/programme Structure
4. Student Support
5. Faculty Support
6. Evaluation and Assessment

Each benchmark was ranked using two criteria. The first criteria referred to the extent in which the benchmark was true for the distance learning programme (ranked from 1=completely absent to 7=completely present). The second criteria referred to how important each benchmark was to ensure quality (ranked from 1=not important to 5=very important). Table 1 presents the scoring for the different benchmark categories. In cases where the interviewed person did not have sufficient knowledge or experience on the benchmark the “Not Applicable” box was checked. The comment box below each benchmark’s section provided the partners with the opportunity to highlight identified noteworthy particularities. The survey results allowed the analysis of aspects such as course development processes, pedagogical guidance and support available to staff, range of activities undertaken by students, resources available to students, interactions with tutors and other students, among many others.

Table 1 – Scoring for the different benchmark categories.

Benchmark Categories	Benchmark Presence		Benchmark Importance	
	Completely Absent	Completely Present	Not Important	Very Important
Course/Programme Development	1	7	1	5
Teaching and Learning	1	7	1	5
Course/Programme Structure	1	7	1	5
Student Support	1	7	1	5
Faculty Support	1	7	1	5
Evaluation and Assessment	1	7	1	5

2.2.2. Additional Information

The information gathered in earlier project phases in combination with publicly available information also proved to be an asset in the selection of the highlighted 8 HEI eLearning programmes. Among the different types of criteria considered were:

- Innovative aspect
- Conferences – highlighted in conference papers or presentations
- Publications – highlighted in relevant books, magazines, online portals
- Offering – offering of courses, certifications, etc.
- Scientific Journals – peer reviewed journals
- Promoting eLearning – influence on the expansion of eLearning
- Accreditation – recognized as to meeting a certain requirement at the regional or national level
- Awards – identified as a leader within the HEI eLearning community
- National press – positive comments within the press
- Initial review survey questionnaire results

Each partner was asked to provide a brief summary (5 sentences) on the innovative aspects of the reviewed 25 HEI eLearning programmes. This information was extremely beneficial in the comparison of the 25 HEI eLearning programmes and in the further selection of the 8 HEI eLearning programmes. The innovative aspects summaries complemented the quantitative and qualitative information obtained from the interview benchmark survey results.

2.3. Data Collection

2.3.1. Telephone Interview Benchmark Survey

The telephone interviews with the highlighted 25 HEIs were conducted by the project partners between October and November 2005. The teachers involved with the HEI's eLearning programme represented the interview target group. The 'Telephone Interview Benchmarks document' was sent to the teachers prior to the interview to allow them to become acquainted with the questions. For each of the benchmarks the partners conducting the interview had to relate the interviewees' response to a quantitative value.

The number of interviews per HEI varied between 1 and 4, with a total of 39 interviews conducted (Table 2).

Table 2 – Number of conducted interviews per country

Member State	Conducted Interviews
Austria	7
France	11
United Kingdom	7
Portugal	9
Hungary	5
Total	39

The telephone interview survey proved to be challenging. The period provided to conduct the interviews was short. Some of the partners experienced difficulties in finalizing the interviews during the desired timeframe.

Similar to the initial review process, the project team had to put forth considerable effort to develop the interest and the confidence necessary for the eLearning community to participate in the telephone interview activity. The teachers representing some of the HEIs were reluctant to participate. There was a fear of receiving a “bad score or ranking” as a result of their participation.

As with all survey questionnaires, time had to be spent in clarifying some of the questions. However, this was facilitated by the telephone interview. The partners had the opportunity to clarify any doubts during the interviews.

An important aspect to mention is the conference calls which were organized by the project partnership. These conference calls were conducted by the different project members on a periodic basis, allowing for the exchange of experiences in dealing with the telephone interview process.

2.3.2. Additional Information

The selection process of the 8 case studies was assisted through a developed matrix³. The matrix provided information on the results of the telephone interviews, plus key indicators such as the

³ The Matrix is presented in Table I in Annex 2 of this document.

application of ICT, scope of application, type of students, existence of a written strategy, and innovative aspects. The matrix aimed to ensure the highlighted 8 HEIs represent not just the leading institutions and well-known success stories, but also those institutions that have applied new and innovative applications of eLearning. The matrix also attempted to identify a range of successful eLearning approaches from different cultures.

The eLearning programmes' innovative aspects were formulated by each partner and summarized in not more than five sentences. In some cases, partners had to make additional contacts (by phone) with the interviewed HEI to identify innovative aspects. In other cases (most of the time), the partners had all the necessary information to present the innovative aspects. The innovative aspects summaries are presented in Annex 3.

The matrix results were shared by the project coordinator with the project partners. Each partner had the opportunity to analyse the data and make recommendations on the suggested 8 highlighted HEIs. Suggestions from the partners were shared with the team and a final decision was determined during a team discussion.

3. INTERVIEW BENCHMARK RESULTS – ELEARNING PROGRAMME SUMMARIES

A general objective of the individual review process was to achieve a better understanding of the 25 HEIs eLearning programmes, including their structure and strategy. This chapter presents individual summaries for the 25 HEI eLearning programmes. All partners contributed to the development of the summaries.

The following characteristics were recommended by the Advisory Panel, and agreed to by the partners, as important characteristics that should be address by the summaries:

- Existence of an eLearning unit.
- Availability of teachers training regarding Learning Management Systems (LMS), eLearning.
- Availability of students training regarding LMS, eLearning.
- European Credit Transfer System (ECTS) implementation and transfer.
- Whether it is referred to blended or pure eLearning, or any other method.
- Innovative aspects on the incorporation of eLearning in the University's general structure.
- Innovative aspects of the eLearning approach itself.
- Linkage to the HEIs' strategy for eLearning should be evident in all cases and needs to be clearly described.

The study found firstly that blended learning is overwhelmingly the preferred teaching mode: in only two of the 25 HEIs were purely online programmes featured as cases of innovation (see also Table 3 - Simplified Matrix).

Secondly, while not all of the HEIs have formal eLearning strategy policy documents, two distinct types of strategies were observed: some HEIs have chosen to target niche markets, such as international postgraduate professional programmes in particular departments; other HEIs are aiming for whole-institution strategies from the start.

For example, Wirtschaftsuniversität Wien provides an example of a niche strategy, beginning Learn@WU in a small way with the faculty of Business Computer Science, and seeing wider acceptance develop. Dennis Gabor College, Budapest, and IAE, Caen have similarly used the niche strategy to build up eLearning gradually. The UK Open University, in contrast, emphasises large-scale systems in

its whole-institution strategy. ENIC, Lille is similar in that eLearning is a required integral component for all programmes.

Thirdly, while there are differences between these types of strategy (see below) in terms of the factors that respondents noted are critical for success, there are also some commonalities. In particular, the study provides some evidence supporting the hypotheses of Bates (2005) that these critical factors included:

- sustainable business plans, including an accurate assessments of the student market and control of costs;
- an ambition for quality assurance processes and student support services to be at least as strong as those in established programmes (whether these established programmes are face-to-face or traditional distance education), with an emphasis on “customer-focused” objectives such as providing timely and constructive feedback on assignments and queries, and on facilitating student interaction with tutors and peers;
- technology that is robust, scaleable, affordable, productive, and widely accessible, with good quality technical support;

Somewhat surprisingly, the use of data on enrolment, costs, and successful or unsuccessful applications of technology to evaluate programmes’ effectiveness was not widespread.

Differences between HEIs adopting the niche strategy and those adopting the whole-institution strategy can be illustrated by comparing Universidade do Porto and the University of Ulster. Both HEIs have multiple campuses, faculties with a high degree of autonomy, and a history of eLearning innovation that had led to a proliferation of systems of varying robustness. But while Porto made a decision to establish institution-wide technological and student support frameworks to advance eLearning, Ulster decided to create international online courses in niches areas incrementally.

For Ulster, critical success factors included ensuring early triumphs, designing the initial technical and student support systems in such a way as to allow generalisability, and targeting staff development at those creating new courses. For Porto, critical success factors included motivating staff through an Excellence Award rather than pressuring them, and promoting best practice cases. Both HEIs established effective central teams to help staff build eLearning courses, and to provide student technical support.

Nearly all the respondents noted that the shift towards eLearning has been accompanied by a shift in pedagogical approach, towards more collaborative, problem-based and project-based learning. Several respondents noted students becoming more independent in their learning: more willing to ask

questions, to seek alternative resources and to discuss with their peers. Educators, too, seemed to aware of changes in their role as students exploit the flexibility of eLearning to become more autonomous and less constrained by place and time.

In terms of applied L(C)MS both proprietary as well as open source software solutions were nearly equally applied and consisted of a broad range of different applications.

Table 3 – Simplified Matrix

Highlighted 25 HEI eLearning Programmes	Member State	Written Strategy	eLearning Unit	Application of ICT			Scope of Application			Type of Students			Applied LMS / VLE	
				ODL	Blended	Other	Institution	Faculty	Course	Regular	Post-graduate	Other (e.g. teacher training)	Name	License / Solution
Technische Universität Wien (Ecodesign)	Austria		x	x					x		x		Self developed, based on Zope	Open Source
Wirtschaftsuniversität Wien (Learn@WU)	Austria	x		x		x				x			Self developed, based on OpenACS-Community System & dotLRN	Open Source
Johannes-Kepler Universität-Linz (WeLearn)	Austria			x				x		x			Self developed	Freely distributed in Austria
ENIC Lille - Ecole Nouvelle d'Ingénieurs en Communication	France	x	x	x	x			x			x		WAPITI	Proprietary
ESSEC - Ecole supérieure des sciences économiques et commerciales	France		x		x			x			x	x	Self developed extension	Proprietary
IAE Caen - Institut d'Administration des Entreprises de Caen	France		x	x	x			x		x	x		Self developed (Ingénium)	Proprietary
Université Technologique de Troyes	France	x	x		x			x		x	x		WebCT	Proprietary
Université Lyon 1	France	x	x		x			x		x	x		Self developed (Spiral)	Open source, Available to 3rd
Université Lyon 2	France	x	x		x			x		x	x		Four point Learning	Proprietary
University of Birmingham	United Kingdom	x	x	x	x		x	x	x	x	x		WebCT	Proprietary
University of London, External Programme	United Kingdom		x	x			x	x	x	x	x		Self developed, based on Lotus Domino	Proprietary
The Open University	United Kingdom	x	x		x		x			x	x	x	Self developed, various, e.g. Moodle	Mixed, Open Source
University of Leeds	United Kingdom	x	x		x			x		x	x		Self developed (Bodington)	Open Source
University of York	United Kingdom	x	x		x			x		x	x		Blackboard	Proprietary
UHI Millennium Institute	United Kingdom	x	x		x		x			x	x	x	Self developed (Bodington)	Open Source
University of Ulster	United Kingdom	x	x	x	x		x	x	x		x		WebCT	Proprietary
Universidade de Aveiro	Portugal		x		x		x	x	x	x	x		Blackboard	Proprietary
Universidade do Minho	Portugal	x	x		x		x	x	x			x	Self developed (EASY)	
Universidade Católica Portuguesa – Instituto de Ensino e Formação a Distância	Portugal	x	x		x			x			x		NetForma / Blackboard	Proprietary
Universidade do Porto	Portugal	x	x		x		x	x	x	x			Luvit, WebCT & Moodle	Proprietary & Open Source
Dennis Gabor College	Hungary	x	x	x			x			x			Self developed, based on ILIAS	Open Source
Eszterházy Károly College	Hungary	x	x		x			x		x			WebCT	Proprietary
Eötvös Lóránt University	Hungary		x		x			x				x	Self developed	Open Source
University of Miskolc	Hungary		x		x			x				x	COEDU	Open Source
Budapest University of Technology and Economics	Hungary		x		x			x			x		NEPTUN	Proprietary

Note - All programmes are listed in the order as presented at the eLearning Programme Review Process Document, Annex 1.⁴

⁴ The eLearning Programme Review Process Document is available at: <http://www.spi.pt/innounilearning/documents.asp>

3.1. Austria

3.1.1. Technische Universität Wien (Ecodesign)

The Ecodesign programme is a highly specialized product, highly designed on all levels from the self-developed learning environment to didactical concepts of delivery for the special needs of a postgraduate education in this specialized field. During the development and the first delivery of the course there was no eLearning unit at the Vienna University of Technology, but an advisory council for eLearning was already established and the unit itself in preparation. In the meantime a new organizational unit was founded – the eLearning Center. “Ecodesign” is one of the programmes that served as a pilot project and as a “best practice” case for the new services. As this program is a very narrow one, which means that the LMS was designed for one special course in Continuing Education, the teacher training was rather individual. Before the course started the first time the features of the program were explained to all teachers. Teachers also had the possibility to test the course in advance and were supported by the course designers and technicians during the delivery, to provide immediate assistance in the case required. The course was developed by using the European Credit Transfer System.

Ecodesign uses a blended mode with three mandatory classroom sessions, one at the beginning, one in the middle and one in the end of the course. The first session was not only used for an introduction of contents, but also for a presentation of the LMS and its facilities. During the course the students had the possibility to ask for technical support via their tutor. Ecodesign is a continuing education course for employed people. For this reason blended learning seemed to be most appropriate and it was crucial to carefully calculate the expenditure of time. Therefore, during the didactical design phase the developers tried to approximately define the necessary time for the different tasks (ranging from small home works to project work), so that the students were able to fulfil the requirements in addition to their regular employment.

Active tutoring is a special didactical concept developed at the Vienna University of Technology. After the first attempts to deliver some courses via eLearning the basic experience was that the drop-out rate was very high. Therefore, a special method – “active tutoring” – was developed where a central tutor tries to give individualized support and even more important addresses the students actively, reminding

them on their tasks, asking questions, etc. This method is especially suitable for small courses in Continuing Education.

Currently this programme, as a pilot project, serves as a case study for the development of an institutional strategy and institution-wide services.

Web URL: <http://www.ecodesign.at/ulg/>

3.1.2. Wirtschaftsuniversität Wien (Learn@WU)

Wirtschaftsuniversität Wien is one of the largest universities of economics worldwide. Therefore, they have to handle a high number of students, most of them at a beginner's level. To meet this challenge the beginner courses are delivered to students from all branches to provide them with a common body of knowledge and to save personal resources for higher studies. Since 2001, this is supported by the eLearning project [Learn@WU](#). The aim was to develop a consistent and interactive platform as well as high-quality electronic learning material. A very important feature is the integration with other services to assure that the management of, and the information about, all courses can be centralized and coordinated. There is no special eLearning unit, but a project and support team at the faculty of Business computer science who the central responsibility. Courses are developed by using the European Credit Transfer System 'Information Package/Course Catalogue' checklist. The programme mainly supports blended learning. Basically the main courses are classroom courses with eLearning as an additional opportunity.

Regular teacher training and computer-based training is available and web based training is in preparation. Support during courses is also available for further questions and trainings. For technological questions there is also a comprehensive online documentation.

For technological questions there is a comprehensive online documentation to assist students on how to use the platform. The eLearning-platform and its functionalities are presented to the first-year students in the form of tutorials for orientation. For further help students can use discussion forums and FAQ-documents.

Learn@WU was seen to be an interesting programme for its applied institution-wide platform with strategic aims for the whole university. Innovative aspects might aim at raising the quality of a highly frequented university with the help of a common electronic learning environment. Another aspect

might be the unification and standardization of the level of knowledge of students coming from very different educational backgrounds. Furthermore, the program wants to enhance the transparency of learning contents and to establish common communication standards. It covers all kinds of applications: organizational information, scripts and contents for courses, exercises and self-tests.

The institution has a written strategy and the team for the program tries to act within this strategy. So, the aim was to provide an institution-wide platform with defined functionalities and options. Nevertheless, the departments and faculties are responsible for the courses and their development.

Web URL: <https://learn.wu-wien.ac.at/>

3.1.3. Johannes-Kepler Universität-Linz (WeLearn)

WeLearn is a free and open learning and teaching framework. It is scalable, platform independent and usable within different learning settings. It also supports the administration of courses, the presentation of learning material and various forms of communication and interaction. Some courses are pure online-courses, but there are also some blended learning courses. Right now there is no ECTS implementation and transfer.

WeLearn is designed as a general solution or platform for the faculty and therefore, serves as an instrument for strategic development, although there is no institution-wide written strategy so far. The benefit of being a self-developed system is that experiences from the courses can be directly used for further developing the programme. On the other hand, the experiences from the development are also used for courses. This enables synergies and added value for the students. There is no special eLearning unit. The program was developed at the Institute for Information Processing and Microprocessor Technology. This institute is also responsible for technical support and other questions. eLearning responsibilities are delegated to designated teachers in the context of an institution-wide initiative. The experiences during the use of the self-developed system are the base for further developments, including active involvement of the students.

There is regular training available for students and teachers that are either computer-based trainings or web-based trainings. There is also a handbook plus a video-version of it, a website with FAQs, helpdesk, mailing-lists and the possibility of personal contacts.

Web URL: <http://experience-welearn.fim.uni-linz.ac.at/WeLearn2/Kernel>

3.2. France

3.2.1. ENIC Lille - Ecole Nouvelle d'Ingénieurs en Communication

Created in 1990 by the Institut National des Télécommunications (INT), on behalf of France Telecom, and the University of Lille 1, l'Enic-TELECOM Lille I is presenting itself as the “*interface between the academic knowledge and the needs of the corporate world*”. ENIC offers Masters degrees in Engineering as well as various continuous Education programs. 70 permanent teachers and researchers are working for the school in the 5 departments. More than 600 students are enrolled in the different programs.

Since its creation, distance education and in particularly eLearning have been one of the key pillars of ENIC's strategy, both for its executives and regular programmes. All tasks related to eLearning within ENIC are the responsibility of one single entity called *Corolia Formation*, which is not only responsible for the content creation, consultancy services for professors of the school and support, but also for the provision of training services to companies. *Corolia Formation* is an economic interest group and as a result is registered within the Chamber of Commerce, enabling it to commercialize its training activities. *Corolia Formation* has gained a significant experience (10 years) and expertise in such activities and has developed innovative and efficient processes to foster the creation and to share its high quality learning materials. ENIC, with the help of *Corolia Formation*, had therefore developed at a first stage an expertise for its internal needs and then, having started later on to offer its services to companies and training centers.

Corolia Formation provides full assistance to professors to guide them during the several creation and teaching steps for the pure eLearning programmes or modules offered by ENIC as well as blended courses. Most of the time, teachers are not creating the content by themselves but are directly involved in the creation processes done by the eLearning scriptwriters, multimedia producers of *Corolia Formation*.

Most of the courses are not yet using the ECTS. The evaluation on the effectiveness of courses is based notably on the enrolment, costs and feedback provided by learners and teachers. The support provided to learners is provided in an efficient and quickly manner as it is one of the most important quality aspects underlined by the eLearning unit. Learners are also getting training to use the different systems.

Interaction among learners and teachers is also an important activity in the eLearning sessions which is fostered through forum, chats.

One of the most interesting aspects of ENIC's activities might be indeed the use of this *Corolia Formation*, semi-independent and "market-oriented" unit, to take care of eLearning actions.

Web URL: <http://www.enic.fr/>

3.2.2. ESSEC - Ecole supérieure des sciences économiques et commerciales

The Ecole Supérieure des Sciences Economiques et Commerciales (ESSEC) was founded in 1907 and is one of the leading Business Schools in France. Located in the suburb of Paris, ESSEC is one of the most recognized "*grande école*" and offers various degrees such as Bachelor in Business Administration, Masters in Management, MBAs, Executive MBA and PhD to its 4,000 students. It has 10 academic departments, and 15 chairs and research centres. It was the first school outside North America to win the Association to Advanced Collegiate Schools of Business (AACSB) accreditation in 1997. ESSEC has concentrated on developing research and teaching of the highest quality. ESSEC has set up a strong partnership with the University of Mannheim and has opened recently a campus in Singapore.

eLearning in ESSEC is notably based on modules of the BANNER system, which was introduced a few years ago. Almost all classes make heavy use of it. Not only to make available teaching materials, but also to create communities among students and foster the exchanges among them and with teachers as well. All reports and papers must be submitted through this system.

The eLearning activities are led by the Media Lab and the eLearning Center, which are separated entities with a dedicated staff. They can act as support for content creation and to assist the teachers, but also to provide technical support for both teachers and students. Helpdesk and advice are clearly identified and accessible at office hours and Professors and staff have a priority "direct line". Prior to any programme, the eLearning staff provides students with a four hour workshop to become familiar with the collaborative working environment, the different eLearning methods and the eLibrary databases research methodologies.

A large majority of eLearning is provided in a blended mode, even if few classes could be purely online

such as refresher courses. ESSEC has made an innovative partnership with CrossKnowledge, a company selling eTraining sessions to companies to provide and distribute learning materials. Some specific programmes could have a different ratio of pure eLearning/blended learning, such as the continuous education programs or Executive MBA. Among the innovative aspects, one should mention the synergies obtained among the different programmes to improve the eLearning services in ESSEC.

The school is without any doubt pushing the use of new technologies into the different learning processes with, for example, the generalization of Wifi on campus to be able to use it during classes and facilitate the collaborative work.

Web URL: <http://www.essec.fr/>

3.2.3. IAE Caen - Institut d'Administration des Entreprises de Caen

The Institut d'Administration des Entreprises (Business Administration Institute) is part of the University of Caen, which is a public higher education institution located in Normandy. The IAE Caen includes a management school with around 2,000 students and a research centre. It offers a broad range of programmes, undergraduate and graduate, which are targeting full-time, part-time and continuous education. One of the particularities of the school is the strong involvement of people from the corporate world into the different curriculum activities: numerous professionals and consultants are giving lectures and students are working on case studies. In addition, IAE Caen has established partnerships with companies such as KPMG.

IAE Caen is also known in France for its early involvement in distance education in the mid-1980's. It has been a strategy of the school to foster this type of teaching and education to increase the quality of teaching and to be able to reach new students outside its natural region, and notably in Africa. As a consequence, some of the programmes are purely online (such as the *Master d'Administration des Entreprises*), even if some blended activities are also offered to full-time face-to-face students. All programmes are using the ECTS.

The eLearning activities within IAE Caen are managed by a dedicated team, which is in charge of content creation, provision of assistance to professors during the creation phase (guidelines for e-

pedagogy and any additional support). Professors do not develop content by themselves and have limited needs on acquiring specific training about the platform, which is described as “very easy to use”. Online-help is available for learners as well as technical support if required but no specific sessions are organized so far. After using WebCT during several years, IAE Caen decided, for economical reasons as well as for a lack of totally adaptable functionalities, to develop with the help of an IT company its own Learning Management System (LMS). Technical and functional support is therefore directly provided by the team and the IT company allowing for very fast answers and bug fixes whenever they occur.

A particularity of this organization is that the eLearning unit services are being pooled with several schools and universities, fostering synergies, re-use and costs sharing. The team has, as a result, developed a real expertise in content creation with optimized development cycles to reduce costs and maximize productivity and quality. Some of the modules developed are even sold directly online, which is a way to generate revenues and increase the overall quality of the courses provided online to any student.

Web URL: www.iae.unicaen.fr

3.2.4. Université Technologique de Troyes (UTT)

The University of Technology of Troyes is a public institution awarding degrees and diplomas that are accredited by the Ministry of Higher Education and Research. Established in 1994, the UTT has a global enrolment of 2200 students in Masters and Ph.D. programs. More than 130 researchers and lecturers work in the different academic and research departments. The standard engineering Master Degree (Diplôme d'Ingénieur) represents the most important programme offered at the University of Technology of Troyes. The classic curriculum consists of a common core, followed by an additional common core of Major studies, and finally the Major with its chosen specialisation.

The eLearning activities are the responsibility of the CIP department (Centre Ingénierie Pédagogique). This unit offers trainings but also dedicated personal assistance to professors for the use of eLearning in the different courses. It includes training on UTT's portal named TEMIS (based on the LMS WebCT), and also on content creation itself and in particular the transition to online teaching. Teachers are of course welcome to contact freely the CIP if help is required.

A common use of eLearning in UTT is notably to provide blended activities, which includes a pre-online session to ensure all students have a similar knowledge and level before the official start of the class. All classes implement the ECTS.

Collaborative work and interaction among students and professors are seen as a high priority and is going to be fostered in the near future. The “live support” for students during the online sessions is not fully present, but initiatives are taken to improve it soon. Some additional services are currently not completely available such as e-library. Several online self-learning modules are also offered to allow students to improve their skills in the different softwares they have to use for their curricula or to prepare a class.

Web URL: <http://www.utt.fr/uk/index.php>

3.2.5. Université Lyon 1

Officially established in 1971, the University of Lyon 1 – Claude Bernard is a public institution awarding degrees and diplomas that are accredited by the Ministry of Higher Education and Research. There are 30,000 students enrolled in the University, which offers all kinds of degrees from bachelor to PhD in most of the scientific areas. The University is organized in 14 colleges (called UFR) and 102 research units where more than 2,000 full-time professors and researchers are working. With a global budget of 250,000,000 EUR, the University of Lyon 1 is one of the four biggest universities in France.

The eLearning activities are managed by one dedicated service called PRACTICE, where 30 persons work full-time. The team is composed of content developers, web designers, developers, and a project manager to ensure services for each part of the value chain during the content creation or the student/professor support. PRACTICE has developed its own Learning Content Management System (LCMS), called SPIRAL, which is heavily used by students and professors. SPIRAL, which is also used now by other institutions and available upon request, has been introduced to face the increasing licence fees of commercial LMS and to get a wider independence in development of new features.

Face-to-face training, as well as individual coaching, is offered to teachers on a regular basis with further ones being available on demand. Training focuses on the use of SPIRAL but also on the content creation. The content itself is in general created directly by the PRACTICE members with the

supervision of the teachers. Several materials are also given to each student during the registration process to present the different available services and to make sure they will be able to use it easily.

Most of the eLearning activity is done in a blended way, even if some modules can be offered purely online as a pre-requisite of another blended class. The use of ECTS has been generalized recently to all classes.

eLearning has been in the core strategy of the University being seen as a way to improve significantly the quality of teaching. The eLearning strategy is, as a result, detailed in the contract signed between the University and the minister of Education. eLearning is also used to offer scientific simulations that would be difficult to organize for all students because of the few materials effectively available. eLearning has been also introduced in the first year of Medicine school⁵ to offer an equal access to educational material to all students.

SPIRAL is now a key pillar in the school teaching methods and some teachers have underlined how it has changed their way of teaching. The interaction among teachers and learners has been drastically improved as well with moderated forums, which are used massively by students to contact their professors and also to get support from the PRACTICE team.

Among the innovative parts, the generalization of SPIRAL in the University and its full integration with others e-services should be stressed as well.

Web URL: <http://spiral.univ-lyon1.fr>

3.2.6. Université Lyon 2

The University Lyon 2 was created as a result of the Edgar Faure law (1968). According to this law, each university must be a legally independent establishment. The different programs available (210 in total) comprise law, humanities and social sciences. The University is organized in 6 colleges, 7 Institutes and 48 laboratories with a total of 2,500 full-time researchers and professors. The number of students rose significantly, reaching today more than 28,000.

⁵ In France, the first year of Medicine school is used to select the best students through a competitive exam.

The University launched in 2001 a very ambitious program with an eServices module (including eLearning) in the heart of the strategy of the different schools and departments.

The eLearning services are managed by a dedicated team called “Web-TICE”, which is taking care of content development, and technical support for teachers and learners. They were also strongly involved in the integration of “ENT” (Environnement numérique de travail – Digital working environment), which offers a range of eServices to the 30,000 faculty staff and students. Each of them have as a result a virtual desktop that they can access from anywhere through the web, PDA or even mobile devices with WAP technologies. A real focus has been put on connectivity as students can be contacted automatically by SMS by the platform if required. The eLearning services, based on the Four Point LMS, are integrated in a seamless way within the ENT. The registration, which is not mandatory, is done online by users themselves (more than 70% have done so, a proportion which is constantly increasing).

The University has invested a strong effort in training and support for teachers and learners. A mandatory training has been offered to all teachers and continuous training is available throughout the year. Thousands of flyers have been distributed as well in the whole campus to present each of the tools available, and a Web-TV presents regularly the platform and its features. All new students have a 12 hour training class at the beginning of the academic year to get to know the different eServices.

Most of the eLearning activities are used as blended learning for different classes, which are all using the ECTS, and therefore very often mixing face-to-face sessions and online modules. Exchanges between students and learners have been heavily fostered with the introduction of forums and chats, which are well appreciated in this huge higher education institution.

Web URL: <http://etu.univ-lyon2.fr>

3.3. United Kingdom

3.3.1. University of Birmingham

The University of Birmingham is a major research-led institution based in England's second city, and a member of Universitas 21. Founded in 1900, it was one of the first campus-based universities, and now has nearly 17,000 undergraduates and 7,000 postgraduates.

Although the University has been dabbling with online technologies since about 1995, demand has soared since the introduction of its central eLearning unit and the implementation of WebCT in 2001. It has also been conducting extensive research in mobile learning.

The mission of the University's Learning Development Unit (LDU) is to help integrate innovative teaching into the mainstream curriculum, and incorporates an eLearning team.

The University funds learning development projects of up to £15,000 each to explore innovations in flexible learning and teaching. For example, the University is piloting new forms of interactive assessment, online simulation and rich multimedia course content. These projects are formally evaluated and the lessons learned shared.

The Higher Education Funding Council for England (HEFCE) audited the work of the LDU and concluded:

"The LDU has developed as a powerful mechanism for co-ordination and collaboration, across the schools, with other institutions and notably as an integrating factor across the other institutional services, ensuring that innovations [in learning and teaching] are well supported by a scaffolding of staff development, technology and information services."

With funding from the UK government and Microsoft, the LDU and the Centre for Technology and Distance Learning (CETADL) have been exploring how the design of physical learning spaces that incorporate new technologies relates to student patterns of learning, particularly group-work. See www.ldu.bham.ac.uk/espaces

The University is currently investigating wireless LANs, mobile learning, location-aware systems, and interactive logbooks. It has developed, for example, an advanced "flexible learning room" for multimedia and video conference teaching. It has also conducted extensive trials of wireless hand-held personal digital assistants (PDAs).

The LDU supports academics in doing scaleable and sustainable development projects, and these projects constitute a form of continuing professional development. In addition, a “Centre of Excellence in Teaching and Learning” (CETL) has been awarded to the University, and this will help spread good practice.

Another key aspect of professional development in relation to eLearning is in the form of an online course that staff undertakes entitled “The Student Experience”. Staff is helped to understand the student experience by being put on a course themselves (on the subject of cryptic crosswords). They work in the way students would if doing an online course themselves, using WebCT, and so experience a learning situation themselves, in which expertise in their own subject area is not as important as reflecting on the learning experience itself. This form of professional development has proved very popular.

When staff come to develop WebCT materials themselves, basic authoring training is provided in the form of courses offered by Information Services. Further training courses are available when, for example, systems are upgraded or new systems are introduced. Subsequent technical assistance is provided when needed by a computing helpdesk. The LDU can also provide advice on pedagogical matters, choice of technology, and the use of tools such as CAPTIVATE. It is hoped to introduce a knowledge base in due course. Further support for staff is provided by a liaison librarian for each programme.

A further model of professional development, the Community of Practice, can be seen in the Physics department, which has a policy of allowing its academics to observe the teaching of their colleagues.

Prior to registration, students are provided with course descriptions, including technical requirements, are available in a mixture of on-line and paper formats. Several courses have pre-entry exercises. It is seen as helpful for retention if there are realistic expectations of what the course involves.

Once they have registered, students have access to a course handbook and to a range of web-based training, and to a computing helpdesk providing both email and telephone support. The helpdesk aims to respond to 90% of queries within two working days. In addition, each programme has liaison librarians.

Courses are typically blended, even those where the student is on campus. About half of the courses have optional online components; 10% are fully online; and 40% are dependent in some way on the web.

The University provides hundreds of courses via WebCT, which has been fully implemented across the University since 2001. About 20,000 students and 800 staff are using eLearning, across some 4000 modules.

The development and quality assurance processes for eLearning courses conform to the same standard as for all courses. The primary organisational units within the University are the 20 academic Schools, which have significant devolved academic and financial responsibilities. The schools are the main focus for learning and teaching, and individual schools and departments have freedom to set their own policies and practices within a framework laid down by the University. All courses ask for student feedback, for example.

The expansion of eLearning has gone hand-in-hand with increased investment in the VLE infrastructure. In addition, 90% of student accommodation now has network access, while the campus itself is moving towards ready availability of power supplies, wireless LAN, plasma screens, and grouped seating. Lecture theatres increasingly double as cyber cafes.

WebCT provides the core of the central eLearning service, although functionality and usability are enhanced by the use and integration of other eLearning services. Currently these include assessment systems such as QuestionMark Perception, Respondus and TRIADS (Tri-Partite Interactive Assessment Delivery System).

Email, face-to-face discussions, chat rooms, video conferencing, asynchronous text-based discussions and audio conferences have been used on various courses for both learner-to-learner and teacher-learner interactions.

The University provides access to various online services and databases. For example, it subscribes to “HERON”, a service that provides students with quick and easy off-campus access to learning materials, primarily book and journal extracts. HERON has developed a resource bank of over 2.5 million digitised extracts for rapid re-use, and also provides a copyright clearance and digitisation service to the University. Another example is the service “SFX”, which dynamically interlinks diverse electronic digital libraries. Birmingham also purchases text from a service called “ebrary”.

An example of an innovative programme is the BSc degree in Physiotherapy, which provides students with online video clips through which they have to diagnose stroke patients’ conditions. The programme is innovative in using online video with the VLE. Students have to learn how to tell from a stroke patient’s movements which side of the brain has been affected by a lesion. Previously, it was

possible for each student to see only one patient. With the use of online video clips, each student can examine a number of real cases, rewind clips if their diagnosis was wrong, and be asked standard questions about these cases.

Another example is the Medicine graduate entry course, which is for people with a good degree in a bio-medically related subject area, but no prior clinical experience. In the course, students who are on placement in various medical settings use asynchronous discussion boards to engage in Problem-Based Learning using fictional patient case histories, with moderation by working doctors. The University produces more medical doctors than any other university in Britain, so this innovation to allow students on placement to interact easily with each other and with working doctors is particularly significant.

Other innovative programmes include the Continuing Professional Development programme in Dentistry, which makes extensive use of online services; the Social Science postgraduate course “Diverse Communities”, which has been nominated for an award; and the induction to the Law programme, which uses the VLE to provide better preparation for visits to a Magistrates’ Court. The University was also awarded an eLearning-related “Centre of Excellence in Teaching and Learning” (CETL), focusing on mental health, in 2005.

The LDU reports that these innovations have led to an increase in student numbers and improvements in educational standards, while costs have remained fairly constant.

Web URL: www.bham.ac.uk

3.3.2. University of London, External Programme

The External Programme of the University of London is one of the oldest distance learning providers in the UK. The University of London is a federal university comprising 20 colleges and a number of smaller specialist Institutes (including Birkbeck, Imperial, the Institute of Education, King’s, the London School of Economics, and UCL).

It currently provides courses to 34,000 students in 180 countries, with 3,500 students accessing their courses online.

Many of the constituent colleges and institutes have their own learning development units, which

promote eLearning. There is also a Centre for Distance Education (CDE) that promotes collaboration and knowledge-sharing in distance education.

CDE coordinates an advocacy and development network in the Colleges, Institutes and the Central University. Its activities include:

- coordinating and supporting the activities of Distance Education Fellows in the Colleges;
- managing the distribution and monitoring of Teaching and Research Awards for the External System;
- providing training, knowledge management, development funding and consultancy services;
- organising development fora including symposia, seminars and conferences;
- managing the work of a panel of experts and specialists.

Teaching staff responsible for content development of eLearning have available to them classroom-based, computer-based and web-based training.

Support channels for content development and tutoring of online classes include email, phone and help desk.

Online and paper-based documentation is available to inform learners about course technology requirements. The preferred support channel is email.

Issues relating to the award and transfer of credits are being given careful consideration. The means which credits might transferred between London and other institutions, and the ways in which credits reflect student competence and knowledge obtained, are being discussed and defined. A flexible credit system is seen as increasing the convenience (and thus the quality) of the study experience, and may also allow students to vary the mode by which they choose to study. In particular, ECTS is being applied to law qualifications.

The External Programme has a few courses that are entirely online; other courses are supplemented by online services. Courses description and learning outcomes are accessible in a mixture of online and paper format.

The External Programme has had an Online Library since 2001, and an eCampus portal since 2002. Many of the Programmes use the University's "Effect" VLE, which hosts (among other functions)

discussion forums, assignment handling and notice boards.

Recent online courses that make significant use of the VLE include: Postgraduate Diploma in Applied Geographic Information Systems; MA in Applied Educational Leadership and Management; MA in Open, Distance and Flexible Learning; Master's in Clinical Dentistry (MClinDent) Prosthodontics.

One highlight is the postgraduate programme in International Primary Health Care. It is one of the longest-running online programmes in the country and is about to begin its seventh year. The programme is also innovative in bringing more developed nations into contact with developing countries. A team of academics from the International Primary Health Care programme won the 2005 e-Tutor of the Year Competition coordinated by the Higher Education Academy and the Times Higher Education Supplement. The judging panel praised the submission for its orientation towards the pedagogical process. The judges also noted the way in which developments on the programme were now influencing the work of other course teams across the university, with several adopting the idea of an induction module.

Another example of an innovative programme is Royal Holloway's MSc in Information Security, which provides a rich environment of multimedia components, interactive materials, and tutor-facilitated seminars, with electronic resources, databases and online discussions.

The federal nature of the University of London leads to complex relationships between the External Programme's distance learning endeavours, and the eLearning innovations of the University's colleges and institutes.

Web URL: <http://www.londonexternal.ac.uk>

3.3.3. The Open University

The Open University (OU) is the United Kingdom's only university dedicated to distance learning. They have around 150,000 undergraduate and more than 30,000 postgraduate students, and about 10,000 of their students have disabilities. The Open University's style of teaching is called supported open learning. Nearly all students are studying part-time. About 70 per cent of undergraduate students are in full-time employment. More than 50,000 students are sponsored by their employers for their studies, with 11,000 people currently studying for OU Higher Degrees. Most OU courses are available

throughout Europe; some of them are available in many other parts of the world, with more than 25,000 OU students live outside the UK.

Although the University itself is ranked among the top UK universities for the quality of its teaching (see news release), a third of their UK undergraduate students have entry qualifications lower than those normally demanded by other UK universities. The Open University maintains one of the largest and most successful online learning communities in the world, currently supporting over 350,000 active students and associate lecturers -- each with licensed access to FirstClass. It's website generates 50 million page impressions a month and content is spread across 2000+ websites. More than 200,000 students can sign in to our online learning environment and more than £100million of online registrations are taken each year.

The Learning and Teaching Office has started a new programme worth nearly £5 million to build a comprehensive online student learning environment for the 21st century. The development, which will first appear in May of 2006, and be fully operational for February 2007 courses, will see the largest use of Moodle in the world. Moodle is a free, Open Source software package course management system used by educators to create effective online learning communities. There are five major units that provide technical assistance and technology assisted education. Instructors are not assessed on their skills in using technology, but comprehensive monitoring systems pick up on instructors who do not know how to use the range of technology available to them for pedagogical purposes. All staff can access training at many different levels from over 200 presentations per year, in addition to the online resources that are available as well. Privacy issues are taken very seriously and data are very tightly protected and the survey unit anonymises data.

The progression of students is evident in their ability to cope with less and less structure and wider use of library. There is a danger of overload of training and course information, but in a risk averse culture it is unlikely the amount can be reduced. Hands on training is course specific – the techniques of searching documents is different in different disciplines and with different types of documents, search engines and databases. OU has to be very responsive with needs analysis and training because students are often isolated geographically

The faculty includes part-time teachers on whom the University relies very heavily, and there are exceptional levels of interaction, continuous assessment, conferencing, emails, phone support includes student to student as well as student to faculty. Email system can handle 200,000 students even if they are online at the same time although the scale of the capacity needs sometimes limits other aspects of

the system. Students form sub-groups and student interaction online is important as they do not have face to face community, with sharing of tasks and peer comment on student activity. User data is available and can indicate what causes an interaction and the amount of interaction but there are privacy and ethical issues. Everything can be back mapped to ECTS, validation requires ECTS facility but it is not high profile. The Open University came out very well in the National Student satisfaction survey. Part time tutors are given training in conferencing and email communication, and they are always paired, and the pairs are rotated. The course leader monitors and samples written and electronic feedback with sophisticated systems, a semantic technology device that scans tutors written comments that identifies if the feedback is outwith good practice. Search instruction is on a course by course basis, with greater support and structure in the first year. Criteria of value relates to a particular course.

OU research has shown that technology is liked less where it has been added on to course, but where a course is designed from the beginning to use a new technology it is liked more. There is plenty of evidence around multimethod evaluation that creates management information data. Standards are met, but there is a culture of continuous improvement that led to the development of new standards. Costing is extremely important, and the OU systems can work out the cost of each task students are set. They can model the difference in cost of setting a student a 500 word essay and 2500 word essay. Business case needs to accompany new course that models the cost of different assessment patterns, which will be balanced with educational value. Costs of portfolio assessment are extremely high, because marking is so high.

Four main “backstage activities and systems” that are very important in eLearning

- a) Ability to reversion learning objects, digitise, simulate, that needs a very sophisticated content management system and a university wide system is currently being installed
- b) Moving to structured authoring system that operates in line with common standards and a common template. The Learning Object has metadata attached and it is very easy to reversion and re-use in an efficient way.
- c) Online assessment is extremely important. There is a need to move away from quiz approach. Semantic technology now allows assessment of short piece of continuous prose, ie. Answers up to 60 words
- d) Strong commitment to “open source” as OU is a member of global open partnerships to which OU contributes and takes. Also looking at “open content”, that is making reversioned material

freely available on the web with a commons licence (Moodle). Part of the idea of using technologies is to open access for people who could not afford to buy a university course and the OU is quite radical in this.

Web URL: <http://www.open.ac.uk/elearning/>

3.3.4. University of Leeds

The University of Leeds is acclaimed world-wide for the quality of its teaching and research. One of the largest universities in the UK, Leeds is a popular choice among students applying for undergraduate courses. An emphasis on innovative research and investment in high-quality facilities and first-rate infrastructure means that no fewer than 35 departments are rated internationally or nationally 'excellent'.

Its size and international reputation enables the University to offer one of the widest ranges of academic courses in the UK. During the current academic year (2006) over 32,241 students are attached to 700 different first-degree programmes and 474 postgraduate degree programmes. A further 32,062 men and women are enrolled on short courses with the University.

ELearning at the University of Leeds is 'sporadic' (their description). There is no specific eLearning institutional strategy, as this is incorporated into the University Teaching and Learning Strategy which states that key priorities have been identified for 2004/5 onwards to include:

1. the approval and implementation of an eLearning strategy;
2. the development of the VLE to more closely meet the needs of Faculties;
3. the enhancement of online developmental resources for staff and students;
4. research into and development of high quality student feedback mechanisms as an aid to curriculum development;
5. the identification and dissemination of good practice.

The University of Leeds also has a library strategy group strategic plan 2003-2007 (Progress report Sept 2004), and this also has a small section on eLearning which states an aim of 'developing support for eLearning activities by the provision of tailored subject-specific gateways at the modular and course level', but this information is only related to the offered library resources. It appears that if staff or

student support for eLearning is required, this is designated to library personnel. The Strategy is monitored by the Learning and Teaching Strategy Management Team using an action plan (internal document only) which identifies targets for achieving each objective and covers the period to the end of the 2006/7 academic year. The majority of targets have been met with the remainder being on target for completion well within the period.

There appears to be little progress in respect of ECTS implementation and transfer. ELearning information is clearly inclusive of the terms blended learning and flexible learning.

Currently Leeds is undergoing a restructuring of learning and teaching support and this is having quite a significant impact on the units and staffing involved. It was therefore fairly difficult to answer the specific questions asked, as it is evident that there is a state of some fluctuation at the moment and there appears to be scant evidence of any innovative aspects of the eLearning approach at the present time.

Web URL: <http://www.leeds.ac.uk>

3.3.5. University of York

The University of York was founded in 1963 with 200 students. Since then, it has expanded to 10,000 students and has over 30 academic departments and research centres. From its inception, the university has concentrated on strong viable departments and teaching and research of the highest quality.

The university has four virtual learning environments in use, namely Blackboard, Moodle, Bodington Common, and Sun Microsystems. Web CT has also been used to support individual courses. The University has a dedicated eLearning Development Team (ELDT), responsible for the eLearning Unit. Elearning units are offered within the University's Certificate of Academic Practice which all new staff follows. The ELDT offers further dedicated training and workshops to the university community.

There are a number of eLearning initiatives directed towards the enhancement of teaching and learning for campus-based courses. These initiatives may be placed into the following categories:

- (i) On-line assessment
- (ii) Collaborative learning (knowledge sharing, knowledge creation)
- (iii) Learning objects (supporting self-directed learning pathways)

- (iv) Teaching objects (interactive instructional packages) Distance learning provision

The distance-Learning courses run by the University, which are supported by virtual learning environments include:

- (i) DERS (Health Economics for Health Care Professionals) - supported by Bodington Common
- (ii) Electronics (Project Management) - supported by LearnLinc
- (iii) UKeU/Social Policy (Public Policy & Management) - supported by Sun Microsystems

The University's IT Academy has won a £20,000 Capacity Building Grant for knowledge transfer to industry from the White Rose Research Triangle to help it to develop an eLearning environment, including converting the IT Essentials course to this format. The grant will also provide the infrastructure to allow the Academy to develop further eLearning courses, making both it and the University more accessible to rural communities in Yorkshire, where the time and expense involved in travelling to training courses may be prohibitive.

IT Academy

The IT Academy at York runs a number of other IT courses, including AutoCAD, 3DS Max, Wireless Networking, Advanced Web Design, Grid technologies and Microsoft accredited courses.

eLearning is also included under the descriptors of blended and distance (fully online) learning. The university has incorporated eLearning into the university's general structure by the development of a university policy on content, creation, ownership and sharing, which ensures that all content deployed in live course modules is available to all staff and students and this content may be repurposed/redeployed in other courses.

The most innovative aspect of eLearning itself is that the university runs a number of pilot projects, focusing on a range of pedagogic approaches, (problem-based learning, case-based learning and a "Train the Trainers") to eLearning course development.

Probably the most interesting development at York is the simultaneous deployment of the Learning Management System and Content Management System with staff. Students are able to access all past and current course materials across departmental and disciplinary boundaries.

Web URL: <http://www.york.ac.uk/univ/org/learntech/Elearning-goodpractices.htm>

3.3.6. UHI Millennium Institute

UHI Millennium Institute (UHI) is an institution made up of a partnership of twelve Academic Partners, two Associate Institutions and an Executive Office. Through its constituent partners, it delivers a wide range of higher education across the Highlands & Islands, including degree and higher national programmes, continuing professional development, lifelong learning and research activities. Some centres are relatively large in urban colleges such as at Perth, Elgin and Inverness, others are smaller institutions, but there is no main campus.. All, however, have a student-centred culture and an individual approach to student learning

Without technology UHI would not exist because of the geographical dispersion of its students. The Learning and Information Services department is responsible for UHI Millennium Institute's IT services, networking, video conference facilities, library, learning resources, support for web based learning and virtual learning environments. Given the University's heavy reliance on ICT there is a comprehensive training programme linked to the strategic and operational plans of the University and the explicit teaching and learning strategy. There is local support through the local learning centre in helping students develop skills in using the Internet and the tutor advises on differentiating between academic credibility of different sites, but not formally structured. Many of the University's courses are taught through on-line or blended learning and students are supported in the local centres in developing their ICT skills and the uses of ICT for learning. The whole mission of UHI is to serve students in their own communities and many students are mature with family commitment and there is not the demand to have transfer to ECTS. However UHI awards are in line with SCOTCATS which probably does relate to ECTS but this is not explicit.

UHI students, lecturers, academic partners and learning centres are part of an advanced high-speed electronic network. They have invested £75 million in technology and facilities to provide access to university-level education throughout the region. But UHI is not a 'virtual' institution, and their academic partners and learning centres occupy geographical space as well as virtual space, which their students attend for classes and tutorials. Some UHI students use web-based learning materials and may come together individually or in small groups for video-conference tutorials and seminars, as well as having access to locally based study resources and support. This gives the students the opportunity to have a high standard of education and to choose their learning and living environment either in an urban town, a small village or a rural community

The university has been successful in providing significantly improved access for those who might

otherwise have been excluded through geography and/or personal circumstance, including retired people, working parents, adult returners and people in seasonal employment. Videoconferencing (VC) is a critical part of the advanced communications and technology strategy used throughout UHI for learning, teaching and administration. Currently there are approximately 150 VC units throughout the Academic Partners and Learning Centres. There is also a Multipoint Control Unit (or 'Bridge'), which enables multi-site conferences to be scheduled, monitored and remotely managed. UHI manages more than 2200 multi-site conferences per year in addition to many locally inspired point-to-point calls. This makes UHI one of the biggest users of videoconferencing in the UK and the VC staff work closely with the manufacturers in developing and testing new equipment and facilities in order to continuously develop and improve the service

The 4 key areas for the network's Strategic Educational Priorities are:

- Physical and financial resources
- Academic provision
- Continuous improvement of learner support and widening access
- Research and knowledge transfer

The objectives for Academic provision are:

1. Increase the number of students studying on networked courses, leading to longer term viability
 2. Develop specialised courses where they have niche advantage
 3. Develop lifelong learning provision for those in employment (CPD)
 4. Remove barriers to progression, especially from FE to HE and between HN and degree courses
- UHI students study not only at traditional campuses, but increasingly at the network of Learning Centres.

To achieve this, there is a strategic requirement to maintain a robust Managed Learning Environment (MLE) infrastructure. They also integrate videoconferencing technology, used widely across the partnership, into the learning environment, so that they are able to accommodate greater numbers of small groups of users. Electronic library services are required to provide equity of access to learning resources across the region. There is also a need for robust, scalable and supportable technology for

remote delivery, which includes the ability to deliver a standard, cost-effective and reliable ICT environment into Learning Centres.

Web URL: <http://www.uhi.ac.uk/>

3.3.7. University of Ulster

The University of Ulster is one of the largest universities in Northern Ireland.

It was recently awarded a Centre of Excellence in Teaching and Learning Initiative, Northern Ireland – CETL(NI) – entitled “Utilising Institutional ELearning Services To Enhance The Learning Experience”, with a budget of £1.65 million over 5 years. The University also organises an annual all-Ireland eLearning conference.

The University is a WebCT Institute. There are only 24 in the world. The only other UK WebCT Institute is Coventry. It is implementing WebCT Vista 4.

CampusOne has won a number of awards, for both business strategy and pedagogy.

There is a central team focused on educational development, based in the Institute of Lifelong Learning. From course conception to going live, a team of learning technologists, web developers, graphic designers and content developers work with individual academics to ensure courses are built to minimum standards (pedagogy, technical, accessibility, support). There is full academic validation of eLearning, as with any other programme. All content is authored in xhtml and css to ensure consistency and accessibility of content.

There are four learning technologists with experience in both education and ICT. There is a standard pro-forma that academics complete at the start, but each collaboration is unique and driven by the academics' ideas and needs. There are 28 developers.

Support is offered by email, phone, WebCT helpdesk, a drop-service, and a team who will visit staff in their office to aid development. A central department in the University – Campus One – is proactive in working with academics to develop courses, pedagogically and technically. Training needs are identified individually (e.g. how to get the best out of chat rooms, how to develop interactive material, how to encourage students to contribute to online discussions), and, in addition, generic courses and online resources are also available (how to manage online courses, how to use digital games, how to support

students online). From course conception to going live, a team of learning technologists, web developers, graphic designers and content developers are available for help and support. They also help in issues relating to student enrolment and registration. 350 staff received formal WebCT staff development in 2004-2005.

Formal assessment of academics is not done as part of the training, but course evaluations ask students to rate different aspects of the course (including the lecturer's enthusiasm, and usefulness of resources), and these results are passed both to the academic and to the head of school for formative purposes.

Workshops are run in collaboration with staff development across all levels of experience. All members of staff teaching using the VLE must complete an eTutor training course.

The independent QAA audit wrote:

“Through the Institute the University makes provision for staff development in order to assist staff to engage with the development of eLearning materials and on-line programmes. The University is particularly aware of the need to develop the skills of tutoring for on-line programmes and to this end all staff teaching on-line courses are required to complete successfully the e-moderation programme. All new full-time teaching staff must now complete the eLearning module within the CPD framework, while established staff undertake the module voluntarily. Students enrolling for on-line programmes are provided with an on-line induction and learner support programme”

After acceptance onto a course, all students undertake an online induction (described in a forthcoming research paper for the European Journal of Distance Learning). This includes technical preparation, an introduction to WebCT, and extensive resources on study skills (e.g. note-taking, time management, coping with stress, plagiarism). Evaluation of the induction has led to a move to emphasise the time commitment required.

The induction package includes a large resource area that provides technical preparation and an introduction to WebCT.

Library and technical helpdesk support is provided by email, phone, and live chats.

CampusOne provides a comprehensive public description of all courses, including admission requirements, tuition arrangements, fees, set books, reading lists, technical and assessment requirements. It also provides access to the university's auxiliary services for students, including basic counselling services, career guidance and disability support. Students can enrol online, see news on the web, and get

sms text message alerts

The independent QAA audit reported:

“Students on eLearning programmes have access to a specially designed CampusOne induction package. The package, which has undergone piloting, evaluation and further development, supports students through the enrolment process and provides orientation to eLearning, including training in the use of VLE tools, study skills, self management skills, on-line searching and evaluation of internet resources and guidance on plagiarism. Access is provided to students at the earliest opportunity, as soon as they achieve 'expected to enrol' status and remains available to them in the early stages of their course, enabling them to revisit guidance and refresh skills as necessary. Students of the MSc Lifelong Learning programme confirmed the quality of this learner support package, which has been positively highlighted in a number of validations and reviews.”

“Students confirmed that they receive a comprehensive induction, both to their location and its facilities and to their faculty and programme. The audit team particularly noted the specialist induction programme developed for students on eLearning programmes as being very helpful. This supports students through the enrolment process and provides orientation to eLearning, including training in the use of virtual learning environment tools, study skills, self-management skills, on-line searching and evaluation of internet resources and guidance on plagiarism.”

Students are informed on the website that the majority of modules offered at the University of Ulster are worth 20 UK credit points, the equivalent of 10 ECTS credit points.

Credit points reflect the student study hours rather than the difficulty of the module. Full-time, undergraduate students are expected to take 6 modules each year, which amounts to 60 ECTS credit points. 1 ECTS credit point is equal to 20 hours of student effort, so the workload for each module should be 200 study hours. This amounts to 36-42 hours of study per week. Study includes lectures, seminars, tutorials, practicals, assessment and private study. Although the number of direct teaching hours (lectures, seminars, tutorials, practicals) may vary between modules, the overall workload of each module is expected to be equal.

About 15% of courses are fully online, with a further 50% requiring online participation in some form. Numbers of eLearning courses: IT-related (41), Business & Management (12), Social Science (31), Healthcare (39), Engineering (8), Science (56), Medical sciences (24), Education (25), Earth Sciences (34), Cultural Heritages (17).

University course development processes have built-in reviewing of a number of aspects at several levels. Each module has an annual technical review, an ongoing academic review, and annual subject reviewing. Student feedback is taken into account. In addition there are external QAA reviews of courses offered in the different subject areas.

A strategic approach to developing eLearning has been taken, to attempt to embed it across the University. Management of eLearning is predominantly centralised, with an online portal and virtual campus called CampusOne that makes available all of the institution's eLearning courses. Further information is a <http://campusone.ulster.ac.uk> The advantages of eLearning are seen as relating to flexibility of delivery.

The University's strategy has been to concentrate in niche areas in the graduate market, resulting in around 40% of its postgraduate students now engaged registered on fully on-line programmes and based in about 70 countries. Two examples of innovative programmes are the MSc in Biomedical sciences, with 503 students, which involves a research project that typically take places in the student's workplace but which is mediated by WebCT; and the MSc in Lifelong Learning which requires each student to undertake a teaching role for a defined period.

In an independent audit, the QAA praised the University's "coherent and comprehensive strategy for the development and implementation of eLearning" (April 2005), and went on to say...

"The principles and procedures associated with the assurance of quality of distributed eLearning provision incorporates those for on-campus provision, but are extended to take cognisance of the relevant sections of the Code of practice for the assurance of academic quality and standards in higher education (Code of practice), published by QAA. This is encapsulated within the Framework for eLearning Standards and through guidance provided to Schools by the Institute of Lifelong Learning. The audit team considered that the emphasis given by the University to the assurance of quality in the development and implementation of its distributed eLearning provision was thorough and rigorous."

The University is recognised by the UK Government as a national Centre of Excellence in institutional eLearning services; it has been praised by the national Quality Assurance Agency (QAA) for a "coherent and comprehensive strategy for the development and implementation of eLearning"; and it is one of only a handful of WebCT Institutes outside North America. The University's online portal and virtual campus CampusOne provides extensive services and resources for inquirers, students and staff; and it has won awards and praise, particularly for its induction packages for student and staff, and for the interoperability provided between the VLE and virtual libraries. Another central innovation is

a system that allows academics to create multimedia formative assessment games without programming experience.

Web URL: <http://www.ulster.ac.uk>

3.4. Portugal

The 4 researched Portuguese Higher Education Institutions represent a good image on the transformation of institutions towards incorporating ICT into the educational process. It is worth mentioning a quite innovative project launched by the Portuguese Government and shared by these 4 HEIs: The e-U Project.

The e-U Project

In order to establish the technological framework for the use of ICTx in HEIs, the Portuguese Government launched an ambitious programme called the e-U project (Electronic University, www.e-u.pt). The project is based on a virtual campus network, designed towards the creation of online university services, production and sharing of academic contents and the setting up of university communities.

The project assures students will have access to classes, R&D articles, student papers, grades, book shops and academic administrative services online, as well as access to the internet through a broadband wireless LAN (WLAN). Within the WLAN, students and teachers have access to several online databases, containing articles, papers and other publications from all over the world. The e-U project will also assure that each student and teacher can log in at any given WLAN of HEIs throughout the country.

The project is recognized internationally for its innovative approach and is now a case study for Intel, Cisco and Microsoft.

3.4.1. Universidade de Aveiro

The University started its eLearning activities in 1998. The main objective was to acquire experience with web based learning. The target groups were on-campus students. eLearning at the University is aimed towards helping students with learning and encouraging a diversity of pedagogical approaches. In 2004, the University organized the international conference on eLearning 'eLes04'. The University has also been identified in 2005 as one of the 11 most advanced EU universities in terms of implementing the 'European Credit Transfer System' (ECTS) for all courses. The University is now extending the use of the ECTS to the life long learning process.

The mode of learning is in general blended learning. The University has an eLearning unit (UOeL – eLearning operational unit/ CEMED - centre of multimedia and distance education) to support on one hand teachers regarding content production, and on the other hand teachers and learners regarding general support issues. A second department of the University, called UNAVE, is dedicated to eLearning related teacher training in terms of: 'pedagogy and curriculum development', 'application of ICT' and 'teaching and learning in distributed communities'. A third department, CICUA, is providing general IT related support to students and teachers.

There are three core initiatives at the University to foster the effective use of ICT enriched education, namely:

- EduNet: a graduate course oriented initiative aimed at stimulating web-enhanced classrooms.
- DisNet: a postgraduate programme oriented initiative and focused on blended learning approaches.
- eLearning@unave.pt: a training programme oriented and aimed at providing teachers (internal and external) with the required skills that are needed in the different ICT enriched educational setting.

The relationship between the different initiatives, support units and the relation to the learner is demonstrated in Figure 1 below. Though teachers are not presented in this figure, they are supported by the UOeL / CEMED, UNAVE and CICUA.

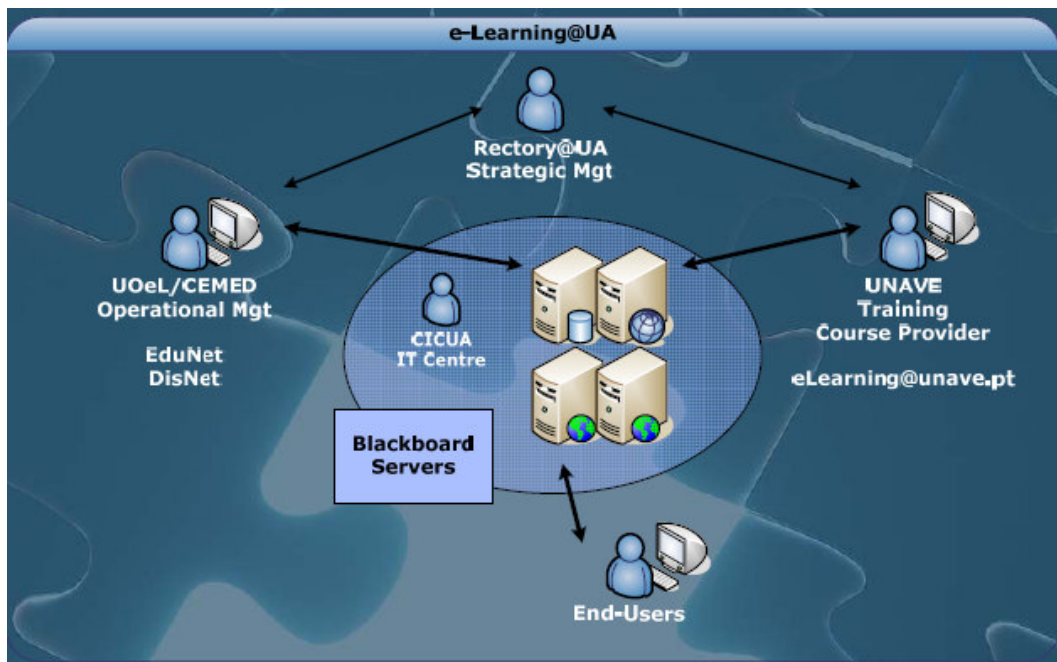


Figure 1: eLearning Structure at the University of Aveiro⁶

The UOeL's main tasks are the user support and system, content and quality management. Faculty support assumes a high importance at the University to assist teachers with the used Learning Content Management System (LCMS), currently Blackboard.

The University is integrated into the e-U project, with the benefit that each student can access from any campus location a large digital repository.

It can be concluded, the University of Aveiro established a solid overall strategic framework to facilitate the transition towards ICT enriched educational offers, which benefits teachers, students and faculties.

Web URL: <http://elearning.ua.pt/>

3.4.2. Universidade do Minho

As part of its eLearning strategy the University implemented a comprehensive University wide platform. The platform consists of an LMS that is linked through Application Programme Interfaces (APIs) to a student management system and a customer relationship management system.

⁶ This image is taken from the presentation 'e-Learning@UA', by Helder Caixinha, UOeL / CEMED, University of Aveiro, 2005

To support the use of eLearning, the University established two departments: the University's service department to support informatics learning (SAPIA) and TecMinho/ that is related to teacher training and content design.

TecMinho/ is aimed towards the training of eTeachers and the creation of an eLearning environment at the University. TecMinho/ is the continuous training office of the University offering courses on eLearning pedagogy, technology and communication to the University's teachers. The work of TecMinho/ is carried out in parallel with the work of SAPIA. SAPIA is responsible for the technological support to teachers in the use of the LMS.

Currently, there are a large number of teachers using a platform named EASY and delivering disciplines through a traditional classroom setting and online solution. All courses at the University are blended courses and are based on learning activities rather than on content. The learning design phase of the University's courses is the most important one, where all the activities, together with the applied pedagogical approach, are first designed by the eTeacher (with the support of TecMinho/). The content of the courses are of a rather supportive nature for learners to perform their activities.

TecMinho/ deploys a LCMS to provide training to teachers and staff. Training is provided in a blended mode with two face-to-face sessions: initial and final. The final face-to-face session is also used to gather feedback on the training course. In order to facilitate interaction and feedback the training course is limited to between 10 to 20 learners. In the end of each course, both content and structure are reviewed and improved based on the feedback received. The training is focused on providing teachers' the skills to prepare ICT enriched contents. Methods on effective web based research are also a fundamental part of the training. Although the ECTS for these kinds of courses are not applicable, the course design follows a clear structure, considering aspects like learning outcome, estimated workload and required learning time. Within the online available 'course outline', information is provided on learning outcome, estimated workload, required time, and minimum infrastructure requirement. To meet teachers and staff training needs, TecMinho/ regularly evaluates its courses through online questionnaires.

The University has a written eLearning strategy and is integrated into the e-U project. The University's Wireless network consists already more than 280 WLAN access points.

Web URL: <http://www.elearning.tecminho.uminho.pt/>

3.4.3. Universidade Católica Portuguesa – Instituto de Ensino e Formação a Distância

As part of the University's (written) eLearning strategy, a new Institute for Distance Learning (IEFD) was created in 2003. The IEFD is mainly directed towards post-graduate level education and pedagogical renewal of the University. The University presently offers plenty of eLearning courses in either an ODL or blended mode. The new Institute is deemed complementary and subsidiary in nature regarding the other (traditional) education structures: Schools, Institutes, Regional Centers, and Study Centers. IEFD developed a broad dialogue with the different University units to identify opportunities and priorities. The idea was to help units become aware of opportunities and define their own priorities in ODL programmes. Moreover, IEFD provides the necessary technical and pedagogical support to help units set priorities. The University deploys two different LMS: NetForma and Blackboard. Besides this the University has a virtual library and also participates on the e-U project, which includes a national wide virtual library called b-on.

The University promotes the use of a pedagogic model called SAFEM-D, which was developed by the University itself and is centred on commonly accepted modern pedagogical principles. SAFEM-D is based on three pillars: Pedagogy, Organization, Management and Technology. It provides 3 different types of classes: Virtual Theoretical Classes, Virtual Practical Classes and Parallel System Training. SAFEM-D is derived from principles of constructivist and collaborative learning and recognizes the value of problem/practice based learning. It fits well to the pedagogical model of providing students with access to international databases and to different types of research material. Collaboration is seen to be very important and for this reason it is aimed to provide students with a learning environment that stimulates collaborative work and interaction. Within this context it was pointed out once students become interested in the subject they really value the use of chats and discussion forums as a means for collaboration and interaction. Student support is seen to be highly relevant with the presence of assigned coordinators. This type of service covers the entire 'non-technical' support side. Additionally, students can benefit from a continuous online helpdesk support service, which covers the technical support side.

Though the eLearning initiatives at this University are quite recent, there are already faculties that can be seen as front runners. The faculty's positive experiences is causing other faculty, which initially were showing little interest in changing their educational approach, to become more and more interested. For new eLearning courses teachers undergo an initial training during a six-month period prior to the start of the courses. In this way teachers were able to gain the required skills and to better respond to

students' needs.

Finally, it should be noted that courses are not designed using the Information Package/Course Catalogue' checklist, since the ECTS itself is currently not applied by the University.

Web URL: <http://www.ucp.pt/site/custom/template/ucptplminisite.asp?sspageid=793&lang=1>

3.4.4. Universidade do Porto

Universidade do Porto (UP) is a traditional university created in 1911, being currently the largest in Portugal. Although eLearning was considered very important for the modernization of UP, the process of introducing eLearning in such a large institution was not easy. By 1999, UP was conscious of the growing importance of the new ICT in Education and a project for Distance Learning called PEDIST was created. PEDIST supported and promoted the use of ICT by teachers and students. From this project it was concluded the UP schools were in very different stages of development and most of them lacked a structured approach to ICT. There was also a lack of technological infrastructures.

In the beginning of 2003, UP started a new project aimed at promoting the use of ICT, and Internet in particular, in the Education process. This project intended to increase the number of courses with an on-line component (by 30 every year) and, at the same time, evaluate the value of eLearning to an institution such as UP. Being that UP is a very fragmented University, it was also intended to involve in this process not only faculty members from every school, but also to have the support of the school itself. The second edition of the eLearning project at UP is currently going on, following a similar approach to the first project. For the academic year 2005-06 there are about 180 disciplines, which use eLearning in some way.

The Head of the University promotes and encourages all faculties and teachers to make use of ICT and supports teachers that want to disseminate their work in national and international conferences. This commitment is also expressed by the University's written eLearning strategy and a highly dedicated department (GATIUP), which has the mission to provide teachers with technical and pedagogical assistance towards ICT enriched education. Assistance consists in training, provision of infrastructure facilities, assistance in the design of learning materials and maintenance of a helpdesk. GATIUP also gathers good practice cases, from within and outside the University, to disseminate the results within the University (e.g. through workshops and seminars). GATIUP operates two different LMS (WebCT

and Luvit). Besides these two LMS a third one, Moodle, is in use at the faculty of engineering. The commonly used mode of learning involving the LMS is a blended one. The University has a virtual library and also participates in the e-U project.

In some of the UP courses, it was noted that in order to optimize the course there would be an examination after each semester following the scheme: review, change and adjust. This examination is carried out jointly with the students and information on the results is made publicly available. Additionally, to the students' feedback related statistical data are used to improve the programmes.

Students' preferences on the features the LMS offers vary from course to course. In some cases teachers expressed positive experiences with forum and chat, meanwhile others noted the opposite. In terms of student support on ICT and the use of LMS specifically, some special faculties started an experimental phase of introduction courses. Subject based support (e.g. hands-on training) is provided to students at a faculty level, meanwhile general support and assistance on ICT is provided through a university wide common support system. Since the University consists of several geographically separated faculties it is felt that there would be the need of better local assistance.

The ECTS is applied since 2004 and since then it has been extremely important for reasons such as comparability and course design.

An innovative approach that is worth mentioning is an internal Excellence Award for eLearning to benefit those who get involved with eLearning. This initiative was seen to be very important in motivating the community and reinforcing the idea that eLearning is a priority within the University.

Web URL: <http://elearning.fe.up.pt>

3.5. Hungary

3.5.1. *Dennis Gabor College*

The College is the best known higher educational institution in Hungary offering its courses by distance education and eLearning. Dennis Gabor College is a fast growing provider in a few fields of study and runs a network of local consultation centres across Hungary and abroad, serving Hungarian minorities in neighbour countries, with about 10,000 students. The offered BSc programmes include: engineering, technical management and economics, information technology, and information technology combined

with economics.

ELearning is predominantly centralised in the institution. The College has a multimedia department for development of eLearning materials, but does not have a separate eLearning unit. There is classroom based and web-based training available for teaching staff responsible for conducting eLearning classes and for learners to become proficient with the technology used to support the eLearning environment. Course/programmes are developed by using the European Credit Transfer System 'Information Package/Course Catalogue' checklist and overall system.

The College offers courses by traditional distance education or eLearning mode. The majority of eLearning activity is connected to "blended" learning. Some of the College training centres offer the courses only by eLearning (ODL).

The students compose their individual curricula from the compulsory, enforced optional and freely chosen subjects. There are no fixed examination periods; any student can choose freely when he/she wants to take the examination. The lectures and examinations are conducted simultaneously and in a uniform way both in Budapest and through the network of consulting centres. As the possibilities of access multiply, GDF publishes on the College homepage electronic training materials and other aids in support of independent learning (sample tasks, interpretation vocabulary, etc.). A student consulting service assists in independent learning. Each student has a personal mentor, who monitors his/her progress in learning and provides intensive assistance until the successful final examination.

The Institution has a defined eLearning Strategy.

Web URL: <http://ilias3.gdf-ri.hu/start.php>

3.5.2. Eszterházy Károly College

Eszterházy Károly College is an acclaimed regional higher educational institution offering a wide variety of educational programmes in humanities, natural sciences, economic and social sciences, sports and arts. The Institution offers 25 college and 4 university level undergraduate programs, in addition to 2 university level auxiliary programs, 9 post secondary schemes and numerous specialized post-graduate programs. There are approximately 10,000 students enrolled at the Institution.

The Institution has a centre of eLearning, the "Open Training and Coordination Centre", which operates as a separate unit. There is classroom based and web-based training available for teaching

staff responsible for conducting eLearning classes and for learners to become proficient with the technology used to support the eLearning environment.

All students initially attend a face-to-face welcome consultation, followed by the provision of an electronic framework, enabling them to send home lessons to the teachers, or to read and learn online the electronic and printed curriculum. ELearning is predominantly provided in a blended mode.

ELearning course/programmes are developed in partial accordance to the European Credit Transfer System 'Information Package/Course Catalogue' checklist and overall system. All students enjoy a freedom of choice concerning course unit selection. By completing all academic requirements of the respective course students are awarded the ECTS credit points of the course.

The Institution' management department established a number of digital open student services like: 'City Information Portal', 'Student Information Point'. A 'Virtual Conference Centre' and a 'Virtual Learning Centre' are currently under development.

The Institution has a defined eLearning Strategy.

Web URL: http://tavoktatas.ektf.hu/webct/public/home.pl?action=print_home

3.5.3. Eötvös Loránt University

Eötvös Loránt University (ELTE) was founded in 1635. The University is internationally recognized and its programmes are accredited by the Hungarian Accreditation Board. The diplomas issued by Eötvös Loránt University are acknowledged worldwide, and its course credits are transferable throughout the European community. Currently, the University has 8 faculties: Science, Informatics, Law and Political Sciences, Humanities, Social Sciences, Education and Psychology, Elementary and Nursery School Teacher Training and the Bárczi Gusztáv Faculty of Special Education. The current number of students enrolled is about 32,000, with an academic staff of 1,800 highly-qualified teachers and researchers. The University does not have a separate eLearning unit. Faculties and departments are the ones in charge of the eLearning management.

There is classroom based training available for teaching staff involved in eLearning activities and for learners to become proficient with the technology used to support the eLearning environment. Faculty members are assisted in the transition towards ICT supported classes, but they are not assessed during the process. Teachers are tested in general by a digital testing process. This training and assistance

does not continue through the progression of ICT supported education yet (e.g. peer mentoring, or an available department for further teacher education), but it is planned for the near future. Such services will be provided by the Centre for Multimedia and Educational Technology – Hungarian licence holder for EPICT, the European Pedagogical ICT Licence.

The majority of eLearning activities found at the University are blended learning activities with teaching materials being developed by creative groups. The use of virtual learning environments (simulations, labs) and collaborative distance learning and distance work - carried out in a real time approach - can be frequently found at the University. Since 2005, a teleconference system has been in operation to provide Ph.D. students with training. To assure the required degree of quality the University introduced a compulsory quality control feature, which is integrated in the learning management system (type: ETR). The University's good reputation is also expressed by 50% of all Hungarian higher scientific degree holders (Doctors and Members of the Hungarian Academy of Sciences) in Mathematics and Natural Science being employed as staff of the Faculty of Science of the Eötvös University. ELearning course/programmes are not developed by using the European Credit Transfer System 'Information Package/Course Catalogue' checklist and transfer. The Institution does not have a defined eLearning Strategy.

Web URL: <http://www.html-kezdoknek.ini.hu/>

3.5.4. University of Miskolc

The city of Miskolc is located in the north-eastern part of Hungary. The Miskolc University has 15,000 students, 800 lecturers and 1,200 other staff. The University consists of three technical faculties and three faculties of the humanities.

In 1998 with the support of PHARE, the Northern Hungarian Regional Distance Education Centre was established as the methodological and international background institution of the faculty and departmental educational units of the University of Miskolc. This had a positive influence on the modernization of training programs, effectiveness, and expansion of offers within the scope of the University of Miskolc.

The University has a separate eLearning unit and eLearning is predominantly centralised in the Institution. The applied system is user-friendly and today's student generally can use it without too

much support. ELearning is most often applied at the entrance level.

There are classroom based and web-based training available for teaching staff responsible for conducting eLearning classes and for learners to become proficient with the technology used to support the eLearning environment. Faculty members are provided with quick and personal support, which is provided immediately by the respective eLearning staff. ELearning course/programmes are developed in partial accordance with the European Credit Transfer System 'Information Package/Course Catalogue' checklist and transfer. The majority of eLearning activities are connected to "blended" learning, where review is performed in a traditional way.

Besides the continuous, personal or electronic consultation possibilities, the curriculum developers can gain access to significant methodological work and to a collection of sample courses in the library. The development of the different curriculum takes place within the project's framework. The Institution does not have a defined eLearning Strategy.

Web URL: <http://queen.odl.uni-miskolc.hu/>

3.5.5. Budapest University of Technology and Economics

The Budapest University of Technology and Economics, the second largest university in Hungary, established in 1997 its Distance Education Centre. It is a member of the largest European distance education association, the European Distance and ELearning Network (EDEN), the most comprehensive European association in open and distance learning (www.eden-online.org). The University hosts the Secretariat of EDEN. Further the Centre co-ordinates the work of the BME Professional Advisory Body for Adult Learning. ELearning is predominantly centralised in the University. The Distance Education Centre of the University is the main centre of eLearning. The Centre has expertise on activities related to distance education especially course development. It developed all together 12 teacher further distance education courses accredited by the Ministry of Education. The Centre has participated effectively in a high number of European Union projects and national projects

Web-based training is available for teaching staff responsible for conducting eLearning classes and for learners to become proficient with the technology used to support the eLearning environment. ELearning course/programmes are developed in partial accordance with the European Credit Transfer

System 'Information Package/Course Catalogue' checklist and transfer.

The majority of eLearning activity is provided in a blended mode. The Institution does not have a defined eLearning Strategy.

Web URL: <http://elearning.itc.hu/niif/inside/oldalok/curlist.php>

4. SELECTED ELEARNING PROGRAMME CASE STUDIES

8 HEI eLearning programmes were selected as highlighted cases based on the methodology discussed in section 2. The highlighted 8 HEI eLearning programmes are listed in Table 3 below. The identified 8 HEIs are a snapshot of institutions that have applied new and innovative applications of eLearning, and represent a wide range of different successful approaches from different cultures. As one may anticipate, France and the United Kingdom are well represented with a total of 5 of the 8 HEI eLearning Programmes. As previously mentioned in Part I of the Noteworthy eLearning Programmes Report, these Member States encompass much larger education communities with longer standing eLearning activities, having well established eLearning programmes in place. Once again, it is important to stress an objective of the project is to highlight successful eLearning programmes that represent a range of eLearning strategies.

Table 3 – Highlighted 8 HEI eLearning Programmes.

Highlighted 8 HEI eLearning Programmes	Member State
Wirtschaftsuniversität Wien (Learn@WU)	Austria
ENIC Lille - Ecole Nouvelle d'Ingénieurs en Communication	France
IAE Caen – Institut d'Administration des Entreprises de Caen	France
Université Lyon 1	France
The Open University	United Kingdom
University of Ulster	United Kingdom
Universidade do Porto	Portugal
Dennis Gabor College	Hungary

Note - All programmes are listed in the order as presented at the eLearning Programme Review Process Document, Annex 1.⁷

⁷ The eLearning Programme Review Process Document is available at: <http://www.spi.pt/innounilearning/documents.asp>

The 8 HEIs will be reviewed in detail as eLearning strategy case studies⁸. The case studies will provide an overview of the institution, a detailed description of the institution's training needs, the e-learning implementation process experienced by the institution, and the eLearning strategy that is in place (support structure, course structure, applied IT tools, management of the LMS, overall integration with the traditional curriculum, etc.).

⁸ Strategy Case Studies will be presented as an eLearning Strategy Study Document.

ANNEX 1 – TELEPHONE INTERVIEW BENCHMARKS SURVEY



InnoUniLearning – Telephone Interview Benchmarks

The twenty-five (25) highlighted higher education institutions selected will undergo a comprehensive review of their respective eLearning activities.

The 'InnoUniLearning – Telephone Interview Benchmarks document' aims at identifying the 8 noteworthy eLearning⁹ programme strategies (case studies)

The information from this survey will be used to compile the InnoUniLearning Noteworthy eLearning Programme Report. A copy of the report will be provided to the interviewed institutions upon its completion.

The methodology used in this survey is based on the study "Quality on the Line – Benchmarks for Success in Internet Based Distance Education".¹⁰ The Benchmarks are divided into six different categories:

1. Course/programme Development	4. Student Support
2. Teaching and Learning	5. Faculty Support
3. Course/programme Structure	6. Evaluation and Assessment

Each benchmark will be ranked using two criteria.

First criteria – to what extent is the benchmark true for the distance learning programme (ranked from 1=completely absent to 7=completely present)?

Second criteria - how important is each benchmark to ensure quality (ranked from 1=not important to 5=very important)?

Procedure

The InnoUniLearning project partners should conduct a telephone interview with the highlighted 25 HEIs **between October and November 2005**.

For each of the benchmarks, the partners should indicate the response from the interviewed persons within the institution. The target group of the interview are the teachers of the highlighted 25 HEIs. The number of interviews per HEI is supposed to be between 2 and 3. The 'Telephone Interview Benchmarks document' will be sent to the teachers prior to the interview to allow them to become acquainted with the questions.

Please note that each benchmark has two criteria (scale) to be answered. In cases where the interviewed person does not have sufficient knowledge or experience on the benchmark the "Not Applicable" box should be checked. The comment box below each benchmark's section provides the partners with the opportunity to highlight identified noteworthy particularities.

⁹ eLearning is defined as "the use of new multimedia technologies and the Internet to improve quality of learning by facilitating access to resources and sources as well as remote exchanges and collaboration." (Communication from the Commission to the Council and the European Parliament, The eLearning Action Plan, Designing tomorrow's education, Brussels, March 28, 2001)

¹⁰ Quality on the Line – Benchmarks for Success in Internet Based Distance Education, The Institute for Higher Education Policy, April 2000, www.ihep.com/Pubs/PDF/Quality.pdf.

Name and Country of the Interviewed Institution: _____

1 Course/programme Development Benchmarks

1.a) Guidelines regarding minimum standards are used for course/programme development, design, and delivery, while learning outcomes - not the availability of existing technology - determine the technology being used to deliver course/programme content.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

1.b) Instructional materials are reviewed periodically to ensure they meet the programme's standards.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

1.c) Course/programmes are designed to engage students in analysis, synthesis, and evaluation as part of their course and programme requirements.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

Comments on identified noteworthy particularities

2 Teaching/Learning Benchmarks

2.a) Student interaction with the faculty and other students is an essential characteristic and is facilitated through a variety of ways, e.g. voice-mail and/or e-mail.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

2.b) Course/programmes are developed by using the European Credit Transfer System 'Information Package/Course Catalogue' checklist.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

2.c) Feedback to students' assignments and questions is constructive and provided in a timely manner.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

2.d) Students are instructed in the methods of effective research, including assessment of the validity of resources. (e.g. how to obtain the required information, evaluation of reliability of online sources, 'critical thinking')

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

Comments on identified noteworthy particularities

3

Course/programme Structure Benchmarks

3.a) Before starting with ICT supported programmes, students are advised about the programmes to determine if they possess the self-motivation and commitment to learn by using this technology and if they have access to the minimal technology required by the course/programme design.

Completely Absent	1234567	Completely Present	Not Applicable
Not Important	12345	Very Important	Not Applicable

3.b) Students are provided with supplemental course/programme information that outlines course/programme objectives, concepts, ideas, and learning outcomes in a summarized and clearly written statement.

Completely Absent	1234567	Completely Present	Not Applicable
Not Important	12345	Very Important	Not Applicable

3.c) Students have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web.

Completely Absent	1234567	Completely Present	Not Applicable
Not Important	12345	Very Important	Not Applicable

3.d) The Faculty and students have clear expectations with regard to times for student assignment completion and faculty response.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

Comments on identified noteworthy particularities

4 Student Support Benchmarks

4.a) Information about programmes are available online for students such as: admission requirements, tuition, fees, books, supplies, technical and assessment requirements, and student support services.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

4.b) Students are provided with hands-on training and information to aid them in securing material through electronic databases, inter-library loans, government archives, news services, and other sources.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

4.c) Throughout the duration of the course/programme, students have access to technical assistance, including detailed instructions regarding the electronic media used, practice sessions prior to the beginning of the course/programme, and convenient access to technical support staff.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

4.d) Questions directed to student support services are answered accurately and quickly, with a structured system in place to address student complaints (e.g. online support system, or technical assistance).

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

Comments on identified noteworthy particularities

5

Faculty Support Benchmarks

5.a) Technical assistance in course/programme development is available to the faculty, who are encouraged to use it.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

5.b) Faculty members are assisted in the transition towards ICT supported classes and are assessed during the process.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

5.c) Instructor* training and assistance continues through the progression of ICT supported education (e.g. peer mentoring, or an available department for further teacher education).

*Instructor refers to the person giving lessons

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

5.d) Faculty members are provided with written resources to deal with issues arising from student use of electronically-accessed data.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

Comments on identified noteworthy particularities

6 Evaluation and Assessment Benchmarks

6.a) The programme's educational effectiveness and teaching/learning process is appraised through an evaluation process that uses several methods and applies specific standards.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

6.b) Data on enrolment, costs, and successful/innovative uses of technology are used to evaluate the programme's effectiveness.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

6.c) Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.

Completely
Absent

1	2	3	4	5	6	7

Completely Present

☐

Not Applicable

Not Important

1	2	3	4	5

Very Important

☐

Not Applicable

Comments on identified noteworthy particularities

ANNEX 2 – SIMPLIFIED DEVELOPED MATRIX

Table I – Simplified Developed Matrix

Highlighted 25 HEI eLearning Programmes	Member State	Written Strategy	Application of ICT			Scope of Application			Type of Students		
			ODL	Blended	Other	Institution	Faculty	Course	Regular	Post-graduate	Other (e.g. teacher training)
Technische Universität Wien (Ecodesign)	Austria			x				x		x	
Wirtschaftsuniversität Wien (Learn@WU)	Austria			x		x			x		
Johannes-Kepler Universität-Linz (WeLearn)	Austria			x			x		x		
ENIC Lille - Ecole Nouvelle d'Ingénieurs en Communication	France		x	x			x			x	
ESSEC - Ecole supérieure des sciences économiques et commerciales	France			x			x			x	x
IAE Caen - Institut d'Administration des Entreprises de Caen	France		x	x			x		x	x	
Université Technologique de Troyes	France			x			x		x	x	
Université Lyon 1	France			x			x		x	x	
Université Lyon 2	France			x			x		x	x	
University of Birmingham	United Kingdom	x	x	x		x	x	x	x	x	
University of London, External Programme	United Kingdom		x			x	x	x	x	x	
The Open University	United Kingdom	x		x		x			x	x	x
University of Leeds	United Kingdom			x			x		x	x	
University of York	United Kingdom			x			x		x	x	
UHI Millennium Institute	United Kingdom			x		x			x	x	x
University of Ulster	United Kingdom	x	x	x		x	x	x		x	
Universidade de Aveiro	Portugal			x		x	x	x	x	x	
Universidade do Minho	Portugal	x		x		x	x	x			x
Universidade Católica Portuguesa – Instituto de Ensino e Formação a Distância	Portugal	x		x			x			x	
Universidade do Porto	Portugal	x		x		x	x	x	x		
Dennis Gabor College	Hungary	x	x			x			x		
Eszterházy Károly College	Hungary	x		x			x		x		
Eötvös Lóránt University	Hungary	x		x			x				x
University of Miskolc	Hungary	x		x			x				x
Budapest University of Technology and Economics	Hungary	x		x			x			x	

ANNEX 3 – INNOVATIVE ASPECTS AT A GLANCE

Austria

Technische Universität Wien (Ecodesign)

The Ecodesign programme is a very specialized product, highly designed on all levels from self-developed learning environment to didactical concepts of delivery for the special needs of a postgraduate education in this specialized field. Blended learning and active tutoring are serving as innovative strategies.

Wirtschaftsuniversität Wien (Learn@WU)

Learn@WU is designed as an institution-wide platform with strategic aims for the whole university. One aim is to raise the quality of a highly frequented university with the help of a common electronic learning environment. Another one is the unification and standardization of the level of knowledge of students coming from very different educational backgrounds. Furthermore, the programme wants to enhance the transparency of learning contents and to establish common communication standards. It covers all kinds of applications: organizational information, scripts and contents for courses, exercises and self-tests.

Johannes-Kepler Universität-Linz (WeLearn)

The WeLearn programme intends to be a general solution or platform for the faculty and therefore, serves as an instrument for strategic development. Being a self-developed system, the experiences from the courses are directly used in further developing the programme. On the other hand, the programme development experiences are also used for courses. This enables synergies and added value for the students.

France

ENIC Lille - Ecole Nouvelle d'Ingénieurs en Communication

ENIC is an engineering school offering MSc and Ph.D degree programmes. It has been created notably taking into account a strong ODL dimension. One of the interesting parts is that the eLearning creation unit has been totally outsourced, with a sort of Spin-Off which takes care of the content creation of the entire school. This unit also creates content for external partners (notably industrial), which has enabled them to set up high quality standards in content and production.

ESSEC - Ecole supérieure des sciences économiques et commerciales

ESSEC is one of the leading French and European Business School, offering MSc, MBA, Executive MBA and Ph.D degree programmes. The interesting part is the total integration of eLearning in all classes (shared collaborative space etc) and in the horizontal dimension in all of their programs. The school also works together with a content provider (crossknowledge.com) to give better access to high quality eLearning resources.

IAE Caen - Institut d'Administration des Entreprises de Caen

IAE Caen is a business school offering bachelor, masters and Ph.D. degree programmes. IAE Caen uses eLearning since the beginning of the 1990s, with first CD-ROMs and Videotapes. IAE Caen is one of the pioneers of eLearning in France and has a strong market in Africa for pure ODL. The institute has adopted a very particular and successful strategy for the content creation where the teacher is treated as a real "client". He gives the outline of the pedagogy he wants to use, and the eLearning unit provides consulting (ergonomy, e-pedagogy) and realizes the full creation of the content. The results shown during a site visit were very impressive.

Université Technologique de Troyes

Lack of available information for this HEI.

Université Lyon 1

Lyon 1 is one of the large universities of the City of Lyon. Often quoted as the most integrated and innovative university in France, the university has set up a wide range of eLearning facilities combining access to lectures on Flat screens on the campus, podcasting, and generalization of eLearning in all class. One of the most important facts to notice is the strong involvement of all the staff and especially how it has been done: a strong help of the Region du Rhone (where Lyon is based) which has been the key partner in the realization of all services. The overall services are very impressive. Lyon 1 has been the first university in France to deploy that range of services to a wide audience and is the leader of an initiative called ENT (Environnements Numériques de Travail - Digital working environments) of the ministry of education.

Université Lyon 2

Lyon 2 is a local competitor of Lyon 1 and the dynamism of the latter has without any doubt pushed Lyon 2 to develop an ambitious eLearning strategy. Lyon 2 has generalized also the use of eLearning to

all disciplines (and not only sciences like in other universities). The eLearning team seems committed and had support from the ministry and have chosen a strong link with a software company (apparently Microsoft). Lyon 2 also disposes about shared workspaces that are available for most of the students.

United Kingdom

University of Birmingham

The University of Birmingham offers a model of an established VLE (currently being used by about 800 staff and 20,000 students, typically engaged in blended learning) with most responsibilities devolved to academic Schools supported by a central Learning Development Unit (LDU). With JISC¹¹ funding, the University has been exploring how the design of physical learning spaces that incorporate new technologies relates to student patterns of learning, particularly group-work.

Two examples of innovative programmes are the BSc degree in Physiotherapy, which provides students with online video clips through which they have to diagnose stroke patients' conditions; and the Medicine graduate entry course, in which students who are on placement in various medical settings use asynchronous discussion boards to consider fictional patient case histories, with moderation by working doctors. Two innovations in relation to staff development, highly praised by a recent external audit, are the "Student Experience" course, which staff undertake together in order to appreciate what it is like being an online student; and funded projects in which staff collaborate with the LDU on innovative teaching developments.

University of London (External Programme)

The External Programme of the University of London provides courses from a large number of colleges and institutes (including Birkbeck, Imperial, the Institute of Education, King's, the London School of Economics, and UCL) to 34,000 students in 180 countries, with 3,500 students accessing their courses online. An example of an innovative programme is Royal Holloway's MSc in Information Security, which provides a rich environment of multimedia components, interactive materials, and tutor-facilitated seminars, with electronic resources, databases and online discussions. Another example

¹¹ The British Joint Information Systems Committee (JISC) supports further and higher education by providing strategic guidance, advice and opportunities to use Information and Communications Technology (ICT) to support teaching, learning, research and administration. JISC is funded by all the UK post-16 and higher education funding councils.

is UCL's postgraduate degree in International Primary Health Care, which is one of the longest-running online programmes in the UK, and brings developed and developing countries into contact. A team of academics from the International Primary Health Care recently won the 2005 e-Tutor of the Year Competition coordinated by the Higher Education Academy and the Times Higher Education Supplement.

The Open University

The Open University regularly carries out extensive and sophisticated retention surveys, and an automated design system has been built in standards monitor before validation and modelling tool that allows forecast of effects of prioritising outcomes and Programme specifications derived from QAA and benchmarks similar to other universities. The University's library has the biggest collection of e-journals outside the British Library large amount of digital resources which have been archived and meta-tagged and a Prolific amount of pre course information, a telephone technology helpline, and tutorial CD's and resources online include typing tutor, guides to programmes, online help desk, materials that explain how technology is going to be used in particular courses. Progression in students support is evident; students coping with less and less structure and wider use of library, hands on training is course specific – the techniques of searching documents is different in different disciplines and with different types of documents, search engines and databases. All staff can access training at many different levels from over 200 presentations per year, in addition to the online resources that are available as well and privacy issues are taken very seriously and data are very tightly protected

University of Leeds

The University of Leeds is a founding member of the Worldwide Universities Network (WUN), which is an international consortium comprising six UK, five American, two Chinese and shortly several European HEIs. As part of its core objectives WUN aims to enhance the collaborative development and delivery of distributed learning and has already made excellent progress in this area primarily by winning a number of bids through the HEFCE¹² funded e-University project, though significant funding has also been obtained from other sources. With the assistance of WUN the University has set up a number of collaborative eLearning programmes with the UK eLearning University including Masters programmes in Geographic Information Sciences (GIS) and Bioinformatics. Support materials

¹² The Higher Education Funding Council for England (HEFCE) distributes public money for teaching and research to universities and colleges. In doing so, it aims to promote high quality education and research, within a financially healthy sector. The Council also plays a key role in ensuring accountability and promoting good practice.

are available and can be downloaded to University of Leeds staff. The University states that it is attempting to benchmark its institution as a whole and that there are ambitious things going on. Technical assistance is perceived to be of a good quality with all involved stakeholders being encouraged to use it. Students are instructed in the use of all facilities for conducting research and there are very clear guidelines on submission dates.

UHI Millennium Institute

Without technology UHI would not exist because of the geographical dispersion of its students. In the development/ validation process the mode is included to assess the impact on costs and the implication for technology that students need access to. UHI has no main campus but has 14 campuses and 80 to 100 learning centres in remote areas, which may only be a computer access room in a library or school on a remote island or valley. UHI's mission is to serve students in their own communities and many students are mature with family commitment and there is local support through the local learning centre in helping students develop skill in using the Internet and the tutor advises on differentiating between academic credibility of different sites, but not formally structured. UHI has very strong network of student support Also there is a strong communication between Academic and Technological support teams

University of York

E'Learning' at the University of York relates to the active engagement of students in knowledge building activities through exploration, reflection and collaborative learning. In this latter design approach, technology is used to offer students enhanced or new types of learning experiences (e.g. simulation, self-directed study activities, self-assessment activities), rather than as a means to replace contact time in class between staff and students. Virtual tools are used to complement class-based instruction, by promoting out-of-class collaborative activities, on-line seminar discussion etc. There are a number of eLearning initiatives directed towards the enhancement of teaching and learning for campus-based courses. These initiatives may be placed into the following categories:

- (i) On-line assessment
- (ii) Collaborative learning (knowledge sharing, knowledge creation)
- (iii) Learning objects (supporting self-directed learning pathways)
- (iv) Teaching objects (interactive instructional packages)

York states however that there is no difference between the traditional programmes and the e learning programmes that they run. York has a reputation for good student support and there is active

development with research resources. They have integrated the library with their VLE. Every student will be involved in the pilot run of this in January 2006.

University of Ulster

The University is recognised by the UK Government as a national Centre of Excellence in institutional eLearning services; it has been praised by the national Quality Assurance Agency (QAA) for a “coherent and comprehensive strategy for the development and implementation of eLearning”; and it is one of only a handful of WebCT Institutes outside North America. The University’s online portal and virtual campus CampusOne provides extensive services and resources for inquirers, students and staff; and it has won awards and praise, particularly for its induction packages for student and staff, and for the interoperability provided between the VLE and virtual libraries. Another central innovation is a system that allows academics to create multimedia formative assessment games without programming experience. The University’s strategy has been to concentrate in niche areas in the graduate market, resulting in around 40% of its postgraduate students now engaged registered on fully on-line programmes and based in about 70 countries. Two examples of innovative programmes are the MSc in Biomedical sciences, with 503 students, which involves a research project that typically take places in the student’s workplace but which is mediated by WebCT; and the MSc in Lifelong Learning which requires each student to undertake a teaching role for a defined period.

Portugal

Universidade de Aveiro

The university started its eLearning activities in 1998. The mode of learning is, in general, blended learning. The university utilizes an eLearning unit to support teachers concerning content and on general support issues as well. A second department of the university is dedicated to eLearning-related teacher training in terms of: ‘pedagogy and curriculum development’, ‘application of ICT’ and ‘teaching and learning in distributed communities’. The university is now at a stage where it considers the term “quality” from a more strategic point of view and, in the future, might even decide for a certification.

Universidade do Minho

As part of its eLearning strategy the university implemented a comprehensive university-wide platform. The platform consists of several software solutions, namely: a learning management system that is linked through APIs (Application Programme Interfaces) to a student management system and a customer relationship management system. To support the use of eLearning there are two

departments, one for the technical support and another for related teacher training and content design.

Universidade Católica Portuguesa – Instituto de Ensino e Formação a Distância

A new Institute for Distance Learning (IEFD) was created in 2003 by Universidade Católica Portuguesa. The University's eLearning activities are still at an early stage. The IEFD is mainly directed towards post-graduate level education and pedagogical renewal of the University. The university presently offers plenty of eLearning courses in either an ODL or blended mode.

Universidade do Porto

In the beginning of 2003, Universidade do Porto started a new project that aimed at promoting the use of ICT (particularly the internet) in the Education process. An innovative approach that is worth mentioning is an internal Excellence Award for eLearning to benefit those who get involved with eLearning. This initiative was seen as very important in motivating the community and reinforcing the idea that eLearning is a priority within the university.

Hungary

Dennis Gabor College

Dennis Gabor College (GDF) is a fast growing provider in a few fields of study and running a network of local consultation centres across Hungary and abroad, serving Hungarian minorities in neighbour countries, with more than 10000 students. There are no fixed examination periods; any student can choose freely when he/she wants to take the examination. Classes and examinations are conducted simultaneously and in a uniform way both in Budapest and in the network of consulting centres. As the possibilities of access multiply, GDF publishes on the College homepage electronic training materials and other aids in support of independent learning (sample tasks, interpretation vocabulary, etc.) A student consulting service assists in independent learning. Each student has a personal mentor, who monitors his/her progress in learning and provides intensive assistance until the successful final examination.

Eszterházy Károly College

The College has about 10 000 students and offers four university degrees. The College has a Virtual Learning Environment (VLE), which enables students to communicate, send their homework to the teachers. The management of the institution established many open services in the College such as a

City Information Portal, or Student Information Point. A Conference Centre and a Learning Centre are under development. The management of eLearning could be considered to be very active.

Eotvos Loránt University

The use of VLE (simulations, labs), collaborative distance learning, or distance work that is carried out in a real time approach, can be frequently found at the University. From 2005 teleconference system will be applied mainly in PhD training. Teaching materials are developed by creative groups with decentralized support channels. Teachers are also provided with training on ICT and the new pedagogical paradigm. Training includes the development of skills of ICT in pedagogy, use of VLE and internet based knowledge sources, and planning of computer aided education.

University of Miskolc

In 1998 the Northern Hungarian Regional Distance Education Center was established as the methodological institution of the faculty and departmental educational units of the University of Miskolc. The centre supports the modernization of training programs, the increase of their effectiveness, and the expansion of their offers within the scope of the University of Miskolc. Besides the continuous, personal or electronic consultation possibilities, the curriculum developers can gain access to significant methodological works and a collection of sample courses in the library. Every curriculum development gets realized within the frame of projects, where continuous methodological support of the curriculum developers makes up the organic part of the project activity. Among the 19 successfully completed projects of the centre, six projects have fundamentally aimed at creating the infrastructural requirements of operation.

Budapest University of Technology and Economics

The Budapest University of Technology and Economics, the second largest university in Hungary, established in 1997 its Distance Education Centre. It is a member of the largest European distance education association, the European Distance and ELearning Network (EDEN), the most comprehensive European association in open and distance learning (www.eden-online.org). It hosts the Secretariat of EDEN. The Centre has expertise on activities related to distance education especially course development: it developed altogether 12 teacher's further distance education courses accredited by the Ministry of Education. The Centre has been participating effectively in a high number of EU and national projects.