

# The Open University of the United Kingdom

## Overview

The Open University of the United Kingdom (OUUK) is generally accepted to be the world's leading provider of distance education.

The OUUK was established in 1969 to deliver high quality distance education to students and developed its supported open learning model (involving local tutors, feedback on assignments, centrally produced course materials through a team approach). The OU is the UK's largest University, teaching 35% of all part-time undergraduate students in the UK each year. Nearly 21,000 OU students study outside the UK.

Since the first students were admitted in 1971, over 2 million people have studied with the OU, achieving over 550,000 awards. The OU promotes educational opportunity and social justice by providing high quality education to all who wish to realise their ambitions and fulfil their potential: 33% of undergraduate students have fewer than 2 A levels; 6% of undergraduate students have a disability; 9% of new students disclosing their ethnicity are from minority ethnic backgrounds; 17% of new students qualify for financial assistance.

One of the OU's greatest achievements was its success in the measurement of academic excellence in UK universities as measured by the UK government's Quality Assurance Agency for Higher Education.

The Quality Assurance Agency for Higher Education of the British Government set up structures to measure academic excellence in more than 150 universities in the United Kingdom, including the Open University.

To many people's surprise, the Open University was ranked in the top ten of British Universities in terms of academic excellence. When one realises that the average age of Open University students is about 40 years and more than 40 per cent of them do not have the required A-Levels to be allowed to study at any other British University, one can see that this is a remarkable achievement.

It shows that distance learning has come of age and that excellence is now demonstrably achievable at a distance.

The statistics placing the Open University in the top ten in Britain with Oxford and Cambridge have been repeated year after year for many years now and cannot statistically be explained as a fluke.

Here is the listing of the leading British universities showing the Open University in the 10<sup>th</sup> position in the first division, with Oxford and Cambridge in the leading positions with York University. The British press chose to

present these results in the form of football leagues and there are three other divisions besides the premier league presented here:

The first division comprised:

- Cambridge,
- York,
- Oxford,
- University College London
- Warwick,
- London School of Economics
- Durham,
- Sheffield,
- Open University,
- Southampton,
- Nottingham,
- Lancaster,
- Bangor and
- St Andrews.

The OU has been rated very highly for teaching quality. Of the 24 subjects assessed by the Quality Assurance Agency, 17 were placed in the top 'Excellent' category.

This study seeks to present the success of the OUUK in the provision of electronic distance education (frequently called e-learning), side by side with the multi-media distance education on which its reputation was founded.

Today 335 of the university's courses have online components that students are required to study. This represents 65% of the university's course provision. The OUUK with open access has gone for a very modular approach where courses are between 10 and 60 points (60 points is equivalent to 50% full time study) in value. Most other universities equate course with award – so if one is studying towards a degree another university would call that 1 course – at the UKOU the student would study between 6 and 12 courses (modules) to get a degree. The term 'online' raises the issue – what percentage of the course needs to be studied online to meet the criteria, or is it just that there is any required online element?

Also if one is looking at eLearning one shouldn't just limit this to online – the OUUK has a number of courses where the university uses CDROM and DVDROM to deliver elearning experiences – eg virtual field trips which would be too bandwidth intensive to study online.

For the purposes of this survey the UKOU meaning of course (a 10 to 60 point module) is used and online is used to mean any course with a requirement to use a computer to study the course. The university's number of e-learning students is 114000.

### **Historical context**

The OUUK first introduced eLearning using the IBM PC in three courses in 1988 (eLearning was used before this by using teletext terminals in study centres). These were what could be called 'medium is the message' courses – e.g. in computing and technology. Since then there has been a gradual increase in the use of eLearning mainly in the Technology, Computing and Business faculties, though with some good examples in other faculties such as Science. This meant that certain areas of the university were building considerable experience and competence, whilst in other areas competence in developing eLearning activities remained lower.

It would have seemed odd not to be using a computer to support studies in Technology, Computing and Business, so the introduction of eLearning in these subjects kept the subjects up to date and relevant for students. With the introduction of asynchronous computer conferencing in 1992 the university was able to build on the benefit of greater communication to build learning communities for distance students and introduce different pedagogies such as group work and accessing digital library resources. There is evidence that provision of these tools helped with student retention.

Development in eLearning was progressing in a step-by-step fashion at the OU, but in 2001 the university's Teaching and Learning Strategy was published. This set some ambitious targets for the adoption of eLearning. It set out that the university would provide optional eLearning activity on all courses from 2002 and all named degrees would contain some courses that contained eLearning elements by 2005. This was principally in target 6.5:

*Establish the critical baseline of IT provision for all students by 2002; build IT elements into programmes to achieve compulsory IT elements for all University degrees by 2005; increase Web-focused courses to at least 20 by 2002.*

The 2004 Learning and Teaching Strategy took these targets further forward, for instance:

*There will be an increase in the numbers of courses where the use of ICT is required over the period 2006-07 and by 2007 around 60% of Level 2 courses and 75% of Level 3 Courses will have compulsory ICT elements.*

Setting such targets and setting out a policy for eLearning as an institutional strategy brought about a step change in the pace of change.

This introduction of eLearning was followed up by evaluation and research. The university has a large academic unit – The Institute of Educational Technology – which does institutional research evaluating student performance with eLearning. They are also responsible for academic staff development so can feed their findings back into staff development programmes. This has made a significant contribution to the quality of eLearning materials and activities.

## **Technical issues**

Competence in information and communication technology at the OUUK can be interpreted at two levels: basic Information and Communications Technology (ICT) skills, or the skills to develop effective use of ICT in teaching and learning.

For the former it can be said that all staff are competent in the use of ICT for word processing, email and Information literacy For the latter the OUUK has an increasing number of staff who are competent at designing eLearning activities. There is also a large media development unit, so as long as academics are skilled in specifying eLearning activities these can be realised through the technical teams.

In general the OUUK tries to use standard browser technology so that the e-learning courses are based on widely used technologies that can be used by students without requiring them to buy additional hardware or software. Currently the main asynchronous communication tool (FirstClass) needs client software, but this is provided on a free applications CDROM to all staff and students. The multimedia simulations play on standard media players. The documents are transmitted in PDF format and Acrobat reader is free software and is also on the CDROM. If a wordprocessor is needed then it is possible to use the shareware Star Office (also on the CDROM). So although students need to load additional software none of it needs to be bought.

The integration between different IT-systems that are involved in e-learning in the institution is an area where the OU has suffered by being ahead of the game. The university has a suite of different systems/ applications performing different parts of the eLearning infrastructure. Integration is much harder than it would be if the university had adopted a single LMS (Learning Management System) or VLE (Virtual Learning Environment) - though that would probably have other downsides such as limiting pedagogic choices. The OU is about to introduce a VLE based on Moodle which will address some of these issues.

The strengths and weaknesses of the e-learning administrative systems are as follows:

Strengths: robustness, scalability, automated processes (imagine having to do manual workarounds for 180,000 students).

Weaknesses: system was developed some time ago and it does not easily adapt to changes in business processes. For instance initially the system was intended for staff use on the campus network, now the university wants to provide more interactive services for students logging in from the Internet.

## **Courses**

The following table gives a breakdown of the percentage of eLearning courses in each faculty:

Faculty	% eLearning courses
Arts	31%
English/ languages	44%
Health & Social Care	41%
Maths & Computing	65%
Business	94%
Science	53%
Social Sciences	27%
Technology	77%

This shows that even in faculties that have been lower on the adoption curve (Arts, Social Sciences) over a quarter of the courses incorporate eLearning.

The obvious starting point in the choice of subjects for e-learning development was 'medium is the message' courses. The main driver has been that students have had to supply their own equipment, rather than the 'onlineability' of the subject. So the university has introduced eLearning faster in faculties where students have had better access to computers and the Internet. One factor that may change this in the future is that the OU is looking to enhance the opportunities that computer assisted formative assessment offers. Currently this is better suited to numeric than discursive disciplines.

Do the online courses provided by the university have flexible start-up and progression? If by this means can students start at any time and progress at their own rate, then the answer is no. Many courses have two presentations per year, but all the courses (for accreditation) run with cohorts of students to a given timetable. The university has found that pacing the timetable with continuous assessment provides a framework that motivates students. Also eLearning opens up the possibility of collaborative project work. This cannot be undertaken if one doesn't have students at the same place in the course at the same time.

The OUUK has now launched its open learn site <http://openlearn.open.ac.uk/> which will provide:

- Over 5,000 hours of online free learning material taken from Open University courses
- State-of-the-art learner support
- Tools connecting learners with learners and learners with educators
- Learning media and technologies on a large scale.

Anyone is free to use open learn at any time they wish, they are not registered as students and they are not studying for credit.

Both synchronous and asynchronous communication between students and teachers, and among students themselves, are considered very important in a distance learning context.

### **Management, strategy and attitudes**

As stated above, setting out a clear university strategy supported by senior managers was instrumental in achieving the university's aims.

Some faculty staff needed convincing of the need to change (and pace of change). The introduction of national benchmark standards in each curriculum area and the need to keep the quality, standing and value of the degrees in line with conventional universities has helped to make the case.

For full time academic staff it is clear that the introduction of eLearning changes working practices within the institution. For instance the OU has run a successful model for 35 years which clearly separates course production from presentation, with course production being an intensive operation carried out in academic teams. The introduction of eLearning is blurring some of those boundaries between production and presentation and the university is adapting its systems and working practices to account for this.

Some of the part time, home based, associate lecturers have been concerned about additional workloads that might arise with the introduction of eLearning. It is probably the case that the work is of a different nature, rather than simply taking more time, and that the difference introduces a learning curve which, initially, appears to increase workloads. It is true that the open-ended nature of some eLearning activities requires a greater application of time management techniques (this is true for both staff and students).

The university's strategy for e-learning is stated thus:

#### *Student-centred objectives*

The application of ICT-based methods of learning, teaching and student support should allow students to:

- 1) experience and benefit from a wide range of effective learning opportunities mediated by ICTs (e.g., collaborative learning, resource-based learning, group project work, computer-assisted formative assessment, online tutorial support, information search and evaluation, integrated multi-media assisted learning);
- 2) experience a graduated development of ICT skills and eLearning skills as they progress along a pathway to a named degree or other qualification;
- 3) achieve particular outcomes required by the University's award structure or external body expectations: (eg. programme-based learning outcomes, QAA benchmark statement objectives, criteria of "graduateness", professional body accreditation requirements);

- 4) develop, through using ICTs in OU study, a range of modern work-related and independent-learning skills that enhance their employability in the knowledge economy and increase for them the pleasure and effectiveness of future learning experiences;
- 5) achieve OU qualifications and more general learning outcomes that are the equal of those of other UK universities;
- 6) experience an enhanced sense of participation in a “community of learners” during their OU study.

### *University Objectives*

To provide the learning materials, services and support that allow OU students to achieve the objectives set out above, and to deliver the tenets of the Vision Statement, the University should achieve the set of objectives set out below.

- 1) construct a OU-wide framework for the development of eLearning materials, services and support, which would achieve the following sub-objectives:
  - i) maximise the collective understanding of effective uses of eLearning;
  - ii) enhance information sharing about eLearning across units;
  - iii) move past “lone ranger” eLearning development by individuals and course teams;
- 2) place pedagogic effectiveness and robustness as well as efficiency of delivery at the centre of our activities in eLearning creation and implementation;
- 3) assure delivery of learning outcomes for which eLearning provides the only, or the most effective, delivery mechanism;
- 4) ground present practice, to the greatest extent possible, in evidence from research, evaluation and successful practice;
- 5) learn from other eLearning providers (both the successes and the failures) in order to surpass the competition in levels of “learning excellence” and student appreciation;
- 6) deliver adequate levels of appropriate training to staff (central, regional and ALs) and to students;
- 7) provide the appropriate ICT infrastructure (VLE, the Enterprise Content Management System (ECMS), the Customer Relations Management System (CRM), digital assets, structured authoring) and assure its continuing development;
- 8) use the “OU Futures” strategic objectives (especially numbers 1,2,3,4,5 and 9) to orient the development of the eLearning policy;
- 9) through OU-based research, evaluation and “horizon-scanning”, maintain informed awareness of pedagogic and technological future developments – bring from the “horizon” to the “operational” as quickly as appropriate.

An action plan was drawn up to deliver these objectives and progress against the plan is monitored.

To a large extent the OU has developed its own approaches to eLearning, rather than by collaboration with other educational institutions

The OU is considered highly credible with the government and public administration and this is considered important for success.

The university has been able to handle the large number of online courses and students by having robust and scalable systems in place to handle the business processes.

## **Economy**

In some ways eLearning is more expensive than conventional models. It is the improvement in the quality of the student learning experience and the different modes of learning that are opened up for distance students (e.g. collaborative learning, access to digital library resources) that delivers cost-benefit-effectiveness rather than a simple measure of cost-effectiveness.

Like all other institutions the OU experiences pressure to be flexible and to be able to adapt to a changing market.

This is stated in the e-learning policy document thus:

*For both pedagogic and competitive reasons the OU now needs to expand and integrate the use of ICT-based teaching and learning support into its courses and programmes and to promote the development of learning communities of students and staff. In so doing, we shall assure our position at the leading edge of open and distance learning development and of online delivery of courses and programmes into increasingly competitive markets around the globe*

and again:

*learn from other eLearning providers (both the successes and the failures) in order to surpass the competition in levels of "learning excellence" and student appreciation.*

## **Conclusion**

It seems clear that, side by side with its acknowledged excellence in multimedia distance education, the Open University is building its expertise in e-learning (electronic distance education) as well.