

THE GAME CHANGERS IN ONLINE LEARNING SERIES

Case Study #4: THE U.K. OPEN UNIVERSITY

**Massive. High Quality. Open.
Affordable. Accredited.**

Twelve key features of the United Kingdom Open University (OU) which, taken together, are game changing:

- Massive: 250,000 registered students a year, equivalent to 85,000 FTEs, of which 73% are 25 years old or older; one-third of all UK part-time undergraduates study at the OU; 70% are working part-time or full time;
- Full range of programs (undergraduate, masters, Ph.D.s, non-credit): 387,000 degrees awarded since inception
- Course design based on a strong pedagogical model
- Consistent model of course development and delivery across the university
- Courses are developed by the OU's 1,200 full-time faculty assisted by learning technology support staff; course delivery supported by 7,000 part-time academic 'tutors'
- Open: 45% of new undergraduates do not have minimum entry requirements for study at a traditional British university
- Massive provider of open educational resources: OpenLearn; iTunesU; YouTube; Open Research Online
- Unique partnership with national broadcaster (BBC)
- Accredited and teaching approved as 'excellent' by national quality assurance agency
- Regularly rated top UK university in national student satisfaction surveys; ranked 43rd of 181 UK universities in academic research
- Student tuition fees 50% below traditional universities
- Strong commitment to research and innovation in online learning

Established in 1969 by the British government, the Open University is a nationally accredited university offering distance education programs mainly to adult students, many of whom do not have the minimum entry requirements for study at a traditional British university. The Open University has been the inspiration for many other developments in open and distance learning, and many of its features have become standard practice elsewhere. It continues to innovate and develop. Based on its current activities, it remains a game-changer today.

STUDENTS

The Open University keeps [extensive statistics](#) on its operation. In 2010/2011, there were 191,500 individual students taking undergraduate programs, and just over 15,000 students taking post-graduate programs. With another 45,000 students taking a variety of

short courses or modules and other programs, there was a total of just over 250,000 individuals studying at the OU in that academic year. 50,000 of these students (20%) lived outside the UK. Because most OU students (70%) are working, many do not take a full-time program of courses/modules. This means that in 2011/2012 the OU was teaching the equivalent of 85,000 full-time students.

The OU has a number of special initiatives to support disabled students. In 2010/2011, there were 13, 500 students with registered disabilities.

Although the majority of students are 25 years or older, over the last five years the proportion of younger students has been slowly but steadily increasing, from 22% in 2006/2007 to 27% in 2010/2011. One reason for this is the rapid increase in student tuition fees in traditional British universities, making it much cheaper for younger students to study through the Open University (even though the OU's own tuition fees have also steeply increased - see 'The business model' below).

Calculating a degree completion rate is difficult, but given there were 10,365 students achieving a bachelor's degree in 2010/2011, and there are the equivalent of approximately 85,000 full-time students taking a three-year undergraduate program, the annual degree completion rate is around 35% (i.e. of an entering cohort, 35% will go on to complete a bachelor's degree).

COURSES AND PROGRAMS

The Open University offers a full range of undergraduate, post-graduate, doctoral and non-credit programs at a distance. It offers programs across a wide range of subjects, including 'hard' sciences, technology, general engineering and law.

The MA in Online and Distance Education is offered by the OU's Institute of Educational Technology, and is delivered fully online.

PROGRAM DESIGN, DEVELOPMENT AND DELIVERY

The OU claims to have a unique style of distance learning called '[supported open learning](#).' There are several elements to this:

- high quality teaching materials developed by multi-disciplinary course teams that include OU faculty, faculty from other universities on contract, educational technologists, media specialists, and independent external academic 'assessors' who review the materials before the course is offered
- teaching materials which may include specially designed printed texts, online videos and mailed DVDs, virtual microscopes and interactive laboratory simulations (which have replaced home experiment kits), as well as opportunities for online discussion and interaction with the university's part-time 'associate lecturers'/tutors. Thus although some programs, especially at graduate level, are fully online, many courses are better described as being multi-media

rather than fully online

- the OU uses a specially modified version of Moodle as its main learning management system.
- locally based learning support: local tutors mark assignments and provide detailed written feedback. They also offer support to students by telephone, email, or computer conferencing. Many modules include opportunities for students to meet their tutors at face-to-face or online tutorials or day schools. Local face-to-face tutorials are optional, but for some courses day schools are mandatory. In a relatively few programs - languages, and the MBA - there is a mandatory residential week or week-end

Although there have been some significant changes over the years, especially the replacement of home experiment kits and residential one week summer schools with interactive digital experiences, and the new partnership model with the BBC, the basic teaching model, which has proved immensely successful, has changed little over the last 40 years. It was a certainly a game changer that had radical influence on post-secondary education around the world in the years immediately following its development, but what makes it a game changer still in the early 21st century?

We would argue that there are two areas where the OU continues to be a major influence in bringing about change in post-secondary education: its strategy around open education and open educational resources; and its research and innovation activities in the area of online learning.

OPEN EDUCATION AND OPEN RESOURCES

The Open University is open in several different ways. The most important in terms of its impact and importance is its open admissions policy. Almost half the students admitted to the undergraduate program do not have the minimum entrance requirements for traditional universities in Britain, yet many go on to succeed. In 2010/2011, 15,000 students were awarded some form of credit for prior learning. Open access was a fundamental principle in its early years, and this still sets it aside from nearly all other post-secondary educational institutions, even today.

The second major development is [OpenLearn](#), an online repository of free learning resources website from the OU. OpenLearn has had 23 million visits since its launch in 2006, the site averages 400,000 unique visitors a month and has around 11,000 hours of learning materials, including 8,000 hours taken from the OU's undergraduate and postgraduate modules. Of the 50 most downloaded resources in iTunes U, 35 are from the Open University. It was the first university globally to reach 50 million downloads from iTunes U. It dominates even MIT's Open Courseware and Stanford's development of MOOCs in this respect.

[Open Research Online](#) is the Open University's repository of research publications and other research outputs. It is an Open Access resource that can be searched and browsed freely by members of the public.

It contains 22,000 original research publications.

The OU has had a partnership with the BBC for over 40 years and co-produces up to 25 TV and radio series a year with the BBC. These are now general broadcasts and no longer directly linked to course materials, but still provide general open educational resources that are viewed by millions, often scripted and presented by OU faculty.

The OU has a department called [Open Media](#) that is responsible for the range of open educational initiatives such as OpenLearn, the relationship with the BBC, an open science lab, and now the development of OU MOOCs (one of which will be on Learning Design). Through this department, the OU is still finding ways to stretch the boundary of 'open-ness'.

INNOVATION AND RESEARCH

Besides the [Open Media](#) department, there are two other centres focused on research and innovation.

The [Institute of Educational Technology](#) provides pedagogical and technology support to the course teams across the university. It has 'data wranglers' appointed in each Faculty to dig into the OU's 40 years of data on its students, and to help identify trends in student demographics. IET staff provide course teams with a computerized, standardized framework for course design, which is able to track variations in course design and their effects on student outcomes, thus providing a dynamic way to evaluate developments in course design.

IET staff also conduct research on different pedagogies and the applications of new technologies in course design. The following report recently identified 10 emerging pedagogical developments linked to new developments in technology:

Sharples, M. et al. (2012) [Innovating Pedagogy 2012](#) Milton Keynes: Open University Institute of Education.

The [Knowledge Media Institute](#) is focused on more 'blue skies' research, in particular emerging technology developments that may have an impact of teaching and learning within a three year time span. Some of the areas under investigation are [linked data](#), [real time semantic concept mapping of meetings](#), [an idea management tool to weave meaningful connections between ideas](#), and [data analytics](#).

ACCREDITATION AND QUALITY

The Open University has been chartered as a university since 1969, but more recently (2009) it was formally audited by the national Quality Assurance Agency for Higher Education and was assessed as 'excellent' in its teaching.

For the last seven years, the OU has been in the top three rankings for

student satisfaction on the National Student Survey conducted each year, out of a total of 180 institutions.

THE BUSINESS MODEL

The Open University's operating budget in 2010/2011 was approximately £450 million (C\$700 million), of which 55% came from government grant, 35% from tuition fees, 3% from research grants, and the remaining 7% from other sources. There was a small financial operating surplus in 2010/2011.

Students pay tuition fees on a per course (module) basis.

However, the OU's funding position is facing dramatic change due to the government's decision to reduce direct funding to institutions and to require institutions to make up the difference from an increase in student tuition fees, which will be supported by low interest student loans underwritten by the government (see 'Challenges' below.).

CHALLENGES

The UK government has recently completely changed the system of post-secondary funding for universities in England and Wales. In effect, it has stopped giving universities funding to support teaching. Instead, universities now have to depend entirely on student tuition fees at around £9,500 (C\$15,000) per student per year to cover direct teaching costs. To cover the tuition costs, students can take out low interest loans which are underwritten by the government. However, to qualify for such loans, students must take a full time 'load' of courses.

This financial strategy strikes at the very heart of the Open University. It has been forced in recent years to move from essentially a 'free' university to one where students are now paying around £5,000 (C\$7,750) a year in tuition fees, which is still almost half the going rate at most other universities in England and Wales. However, most of its students are working adults, and are not taking a full load of courses. Indeed, many of them are somewhat like MOOC students, taking individual courses or a unique combination of courses that fit their particular needs as adults. These however do not lead to the 'recognized qualifications' that makes them eligible for a student loan. Thus the change in financing is devastating for many low-income learners wanting to study through the Open University, as well as for the university. This has started to impact on student enrollments, which so far are down by as much as 40% in the non-credit areas in 2012-2013.

The Open University is looking at a range of strategies, to maintain its sustainability, including greater efforts to internationalize its offerings, and indeed it has seen a change in its student demographics, with younger students who under previous conditions would be applying to conventional institutions instead opting for the lower cost but still high quality and more flexible programs offered by the Open University. At the

same time, while organizations such as the Confederation of British Industry, the OECD and the European Commission are strongly advocating for lifelong learning for working adults, the changes to the higher education funding model seem more likely to hinder than help the OU's efforts in this area.

There is also some concern internally that the Open University's teaching model is still too heavily focused on optional face-to-face tutorials, when online discussion forums can provide equally high quality inter-personal interaction at far less cost.

Lastly, there is still a challenge in integrating the research and innovation activities of the Institute of Educational Technology and the Knowledge Media Institute into the day-to-day design and delivery of courses and modules.

SUMMARY

What follows is a summary of these developments in the form of a table which looks at three questions:

What is a student at the Open University able to do?

Why is this good for students?

and

How does the Open University make it happen?

| An OU student is able to... | Why this is good for students | How OU makes this happen |
|---|--|---|
| Study at university level while working The Open University offers bachelor, masters, doctoral and certificate programs at a distance in a flexible manner, enabling working adults to take individual courses or a whole degree. | Students can study at their own pace from home or work. The Open University provides many employers with better qualified employees while they are still working. | Working with 7,500 part-time tutors, the Open University's 1,200 full-time faculty develop and deliver online courses and programs through a range of multimedia materials. |

| | | |
|--|---|---|
| <p>As an adult, choose a combination of courses that meets the student's individual needs</p> <p>Students can choose to study a whole degree program, take individual courses that meet a particular need, or combine courses from different subject areas to meet a specific need.</p> | <p>Adult learners in particular have specific needs and need the ability to access and combine courses and programs to meet specific needs.</p> <p>Adults can use the Open University to obtain credits that enable them to move to a more traditional university to complete their degree.</p> | <p>The Open University has developed over 500 different courses (modules) at an undergraduate level and 156 at post-graduate level, giving students a wide variety of course and program options.</p> <p>Because the OU is an accredited and well-respected university, most traditional universities in the UK will accept such study for credit transfer.</p> |
| <p>Access a full university program even if they do not have the standard university entrance requirements</p> <p>Admission is fully open, subject to certain residential and nationality requirements, and some language and literacy pre-requisites.</p> | <p>Many adult students need a second chance to make up for lost opportunities when they were younger.</p> <p>The Open University's experience shows that many thousands of students considered not suitable for a university education can succeed, with sufficient support and motivation.</p> <p>Individuals mature through life and need opportunities for flexibly delivered further study, at an advanced level.</p> | <p>The Open University provides financial help or tuition fee subsidies to substantial numbers of its students (65,000 in 2010/2011).</p> <p>It offers students who need more preparation a foundation program.</p> |

| | | |
|--|---|---|
| <p>Receive ongoing academic advice, support, feedback and assessment</p> | <p>Student graduation rates are as high as for full-time students in many North American universities.</p> <p>Student satisfaction ratings are very high.</p> | <p>Use of 7,500 part-time tutors, working in conjunction with 1,200 full-time faculty.</p> <p>Deliberate design of interactive learning materials.</p> <p>Multiple opportunities for social and academic interaction online between instructors and students, both on-line and face-to-face.</p> |
| <p>Access free, open educational resources in many formats and content areas</p> <p>The Open University offers a vast variety of digital materials through its own portal (OpenLearn), iTunesU, YouTube, Open Research Online, television and radio broadcasting, and MOOCs</p> | <p>Supports independent and self-learners.</p> <p>Provides resources for lifelong learning.</p> <p>Provides other educational providers with high quality digital materials they can incorporate into their own teaching.</p> | <p>Re-purposing of digital materials.</p> <p>Open and undisputed intellectual property owned by the university through clear agreements with faculty and staff.</p> <p>A separate department dedicated to ensuring as much learning material is open and accessible to all.</p> <p>Partnerships with other organizations, e.g. the BBC.</p> |

THE SEVEN KEY ENABLING FACTORS

In exploring with the senior leadership and key operational staff of the Open University why these developments have occurred, we identified these factors:

1. **Economies of scale.** From its beginning, the Open University has managed to provide open access, high quality learning, and lower cost per student through achieving massive economies of scale.
2. **Strong pedagogical design.** From the start, it has used research-based learning theories and instructional design to ensure student engagement and activity, quick and individualized feedback, and a consistent model of course development.
3. **Strong learner support.** Through the use of 7,500 local tutors, the

university has ensured each student receives individual attention and support in each course or module.

- 4. Strong political support.** For different reasons, the services provided by the Open University have been strongly supported by all political parties in the U.K. The left leaning parties have liked its open-ness and the opportunities it provides for disadvantaged learners; the right leaning parties have like its support for self-directed independent learners who are striving to improve themselves, the university's value for employers and lifelong learners, and above all its lower cost per student.
- 5. Favourable instructor to student ratios.** There are usually between 20-40 students per tutor, enabling strong interaction and communication between students and instructors
- 6. Technology.** The Open University was designed from scratch as a multi-media teaching university, initially combining specially designed printed textual materials with broadcast television and radio. Over the years the technologies have changed, but the university has adapted to take advantage of the affordances of new digital technologies as they have emerged.
- 7. Integration with the rest of the higher education system.** Its heavy use (on a contractual basis) of faculty from traditional universities, and its focus on adult students, thus avoiding direct competition with traditional universities for student enrollments, has enabled it to establish a particular niche in the market, while at the same time being respected for the high quality of its multi-media materials, teaching and research.

These seven enablers have provided the base from which the OU is now the predominant open distance education university.

These conclusions are based on the November 2012 visit to the Open University's campus in Milton Keynes, U.K, where extensive briefings, demonstrations, and interviews took place which included the senior leadership and key operational staff:

- Martin Bean, Vice-Chancellor
- Josie Taylor, Director, Institute of Educational Technology
- Mike Sharples, Professor of Educational Technology, Institute of Educational Technology
- Patrick McAndrew, Professor of Open Education, Institute of Educational Technology
- Mary Thorpe, Professor of Educational Technology, Institute of Educational Technology
- Eileen Scanlon, Associate Director, research and Scholarship, Institute of Educational Technology
- Peter Scott, Director, Knowledge Media Institute