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Chapter 5

Educational services and the global marketplace

Jos Boys and Karen Stanton

Education and training (whether virtual, conventional or hybrid) is a market increasingly targeted by for-profit organisations, both to supply their own internal training needs and for revenue generation. These may be corporate or public (such as the NHS), online learning providers (such as Phoenix) or campus-based suppliers. How is post-compulsory education in the UK responding to these challenges? What will be the long-term educational impact – both on the student experience and on the ‘shape’ of institutions? And can applying the e-business approach of customer focus, organisational integration and common systems offer some clues as to productive ways forward?

The growth of consortia

Universities and colleges have responded to the increasing globalisation and privatisation of post-compulsory education by developing consortia – both to take advantage of the opportunities offered and to compete more effectively in this changing context. Consortia have enabled the development of new campuses and/or courses organised across national boundaries. In addition, the steadily increasing demand for e-learning in the USA and worldwide has encouraged the development of high-level consortia to allow the sharing of course materials that are expensive for an individual institution to produce.¹

The most famous of these, led by MIT Open Courseware, is a complex stitching together of many different universities. It comprises Johns Hopkins, University of Michigan, Tufts, Utah State, Harvard Law School, Rice and Foothill-de Anza Community College from the USA; with the Universities of Tokyo, Kyoto, Keio and Waseda and the Tokyo Institute of Technology from Japan; the Universities of Barcelona and de las Islas Baleares from Spain; and Peking University, Tsinghua University, Beijing Jiaotong University, Dalian University of Technology, Central South University, Shanghai Jiaotong University, Xi’an Jiaotong University, Central

Radio and TV University, Sichuan University, Nanjing University and Harbin Institute of Industry and Technology from China.

Distance learning is already thriving in the US. The Sloan Consortium's 2005 research report *Growing by Degrees: Online Education in the US* showed a growth from 1.98 million in 2003 to 2.35 million the following year, more than ten times that predicted by the National Centre for Educational Statistics for the general post-compulsory student population. The success and enthusiasm for e-learning in the US, combined with the desire to widen worldwide access to higher education, also underpinned the creation of U21 Global. Established in 1999 and backed by 16 members of the successful international consortium Universitas 21 and Thomson Learning, it launched its first online MBA programme in Spring 2003.

The Observatory on Borderless Higher Education (2005) reported that to date some 400 students from 25 countries were enrolled with a further 1,400 applications waiting to be processed. It could be argued that although enrolments are at a relatively low level to date, increased applications are an indicator of success and that by focusing on clearly specified online products for mainly the Asian and Middle Eastern regions, U21 Global has sensibly drawn from the US experience to concentrate its efforts on an appropriate target market. As of 2006, after two and a half years of operation, U21 Global's MBA programme, for example, had 1,300 students. The Observatory report predicts that enrolments and course offerings are likely to increase at a modest pace over time along with increased brand recognition and reputation.

This growth is enabled both because of the ubiquity of the Web and because its nature is changing – from informational, structured and one-way teaching materials to networked and interactive communication. As Richard Straub, president of the European e-Learning Industry Group says, 'e-learning has moved from formal information to a much more informal, integrated type of learning' (*Financial Times* 20 March 2006).

Mature target markets may, however, be crucial for success. Simon Marginson of Monash University (Marginson 2004) has strongly argued that virtual universities have not attracted higher levels of enrolments faster because an online degree is a less attractive qualification than a face-to-face degree acquired in a foreign country or the campus of a foreign university in the student's country. Evidence to date from the Higher Education Funding Council (HEFCE) e-China programme, attests to the desire in China, at least, for a more blended approach to e-learning with face-to-face tutorials. In China, as in many other countries, there is also a need to build public confidence in e-learning. Another cautionary tale is the experience of the UK Open University (OU) when it tried to extend its distance learning courses into the US. Despite being a recognised high-quality brand across Europe and elsewhere, they were unsuccessful in taking the OU model to America, probably because of underestimating the amount of start-up funding required, the difficulties of regulation in a federalised country and the unwill-

ingness of American students to take on academic products built on a British approach to history and culture.

In addition, although the growth in distance learning in the US has almost all been within its own domestic market, educational providers from outside the US mainly aim to operate globally, raising many issues of language, culture and time differences.

Overall, then, for-profit organisations are beginning to make inroads in to the traditional domain of universities and colleges. What do we need to know about these competitors in the changing UK context and how should post-compulsory institutions respond effectively?

The competitors

David Collis, Fredrick Frank adjunct Professor of International Business Administration at Yale University, proposes five key elements that seem to have the greatest repercussions for traditional colleges and universities: the courses new players offer; their target customer group; where their content originates; the pedagogy they employ; and their pricing (Collis 2000).

In 2000, he argued that new entrants into the American market are predominantly providing business-related materials. Of the companies he studied, 75 per cent were providing courses in management, performance improvement and skills related to employment, such as information technology. Of the remainder, a large proportion were offering courses to lawyers and doctors, focusing on continuing professional development. In addition, most of these were at postgraduate rather than undergraduate level. In a way this is obvious: these are the most immediately lucrative and receptive markets for an entry strategy. Collis suggests that:

as firms build brand names and establish presence in the market, one can predict an evolution in course offerings from short management certificates and continuing education for the professions through more general and softer leadership skills and performance improvement, to an MBA or other professional degree, and only finally into undergraduate liberal arts degrees.

(2000: 12)

Currently, the primary audience for these players is business, one of the largest and fastest growing areas of the post-compulsory education market. It is also often well-suited to online learning, although, as with the experience of conventional universities, completion rates are improved where tutors are also involved face to face, or through an equivalent 'virtual' method such as conferencing.

Collis then explored the three alternative sources of educational content for commercial entrants into the education market: hiring their own staff; licensing existing courses from colleges and universities; and contracting directly with

individual academics (similar to the existing system for publishing academic books). As he says:

The data suggests that entrants are keeping their sourcing options open. Indeed, several major players seem to be pursuing all three options. While deals at the university level are attractive, thus far they have been quite expensive: the long-term trend will probably be for entrants to source materials directly from faculty.

(2000: 13)

This also means that, as with conventional provision, there is no 'standard' pedagogic approach across new commercial providers.

Finally, Collis argues that pricing strategies have the greatest potential to disturb higher education's current environment. This is particularly true of the potential of online learning – new technologies should allow for very low-priced courses, since the marginal cost of delivering it (after the initial investment) could be negligible. However, he also suggests that new entrants to the market will not want to undermine its existing cost structure for customers, and that education remains an experience good (as outlined in Chapter 4), that is, one that is also about the perception and supply of quality and not just price. Others, however, are not so convinced by the 'first mover' argument that these new players will have the advantage in expanding into other areas beyond the lucrative ones of business studies and computing.²

Moving to two extremes?

Many authors argue that the changing context of education is forcing it into two alternative directions: a 'low end', which emphasises standardised services and ease of access, versus a 'high end', which builds on brand status and quality of materials. A *Financial Times* report on Distance Learning MBAs argued that the main difference is between universities who want to build on their existing courses and brands and those that start from the needs of the workplace manager, that is, who design new courses which are explicitly workplace-based: 'For the first group, rigour and accreditation are the main selling points. For the second, scale and flexibility are paramount' (*Financial Times* 20 March 2006).

Terry Hilsberg of NextEd Ltd, using the work of Christensen and Raynor (2003) argues that existing post-compulsory educational providers tend to work from an 'internal' perspective; that is they work from their own internal drivers and not from the demands of customers (Hilsberg 2004). Any changes in educational approach or structure are therefore concentrated in an additive process of sustaining innovations, rather than by challenging or disrupting existing frameworks (see Figure 5.1).

According to Christensen and Raynor, the alternative response of low-end disruption usually occurs where existing customers' needs can be met with a lower-cost business model, that is, by offering lower prices and better margins for equivalent quality. This can mean, for example, standardisation of the components of a product and its processes, which in turn may allow a disaggregation of the whole value chain (see Chapter 4). Hilsberg argues that some community colleges, Asian private colleges and Open Universities internationally have low-cost production processes compared to services provided by the western HE sector, laden with overheads (50 per cent in many cases) and with research expenses. They can make money by slightly undercutting fees compared to these courses and by being able to disaggregate the conventional HE supply chain. This is by both standardising components across courses (similar curricula and textbooks for example) and by working to common standards and systems, such as well-developed credit precedent databases, articulation agreements and standard qualifications frameworks. Meanwhile the speed and connectivity of Web-enabled services allows customised access to potential customers globally.

Hilsberg argues that the 'economic sweet spot' here initially lies with low-cost providers (such as Malaysian colleges). However, as educational services become more commoditised and competitive, the commercial edge will move to those with 'a scarce good', namely those with accreditation and

Figure 5.1 Approaches to growth: the conventional HE approach.



Source: Hilsberg 2004, adapted from Christensen and Raynor 2003.

award-giving powers who can offer 'brand quality' to the post-compulsory market. Hilsberg suggests that this is exactly what is happening in Asian and Australian college and university education, the areas in which his company, NextEd Ltd, operates. But he also says that these struggles over the market continue to shift and notes that the Chinese universities (who control through central planning where their students go) now 'increasingly want to own the whole Western value chain'. We will return to this issue later in this chapter, in relation to University of Nottingham's involvement with the HEFCE e-China initiative.

At the 'high end', the MIT Open Knowledge Initiative (OKI) and its consortia have already been mentioned. Here, universities can sell their 'brand' quality, and most especially the worldwide renown and expertise of particular academics. In this model, the aim is often to produce very high-quality online materials (for example, streaming media of lectures by world-renowned experts in specific subjects, supported by high-quality animations, etc.), which can be viewed globally and supported by teaching assistants in different locations.

HE and FE institutions in the UK will have their own take on these 'extremes' and how they want to place themselves in relation to other commercial and public organisations, both as competitors and collaborators. These opportunities also need to be reviewed in relation to the changing UK educational context.

A changing approach to educational services in the UK?

HEFCE has recently re-released its e-learning strategy following the demise of its e-university project, UKeU (Slater 2005). The failure of UKeU has been attributed to poor market research and a failure to identify student needs; poor leadership; too much concentration and investment in the technology, i.e. a customised learning platform; a large number of overseas offices; too large a number of high brand programmes; and a substantial and costly central London presence (Brennan and Papatsiba 2004).

Based on the work of Slater (2005), the following lessons can be learnt from the problems of UKeU and from the failure of the OU in the US (already mentioned above):

- keep to simple models in line with normal procedures;
- have a clear view of the market;
- spend a modest amount on the development of a platform;
- build in early formative evaluation;
- concentrate where gains are greatest;
- share activities and development wherever it is feasible and realistic;
- have enthusiastic and motivated internal management of process.

Many of these elements have long been identified as success factors underpinning e-learning in the US, much of which has been delivered entirely online to large numbers of students, with evidence of success and underpinned by a conviction that e-learning is at least as pedagogically sound as conventional approaches (Observatory on Borderless Higher Education 2005). Highly successful online learning programmes, especially in terms of student enrolments, have been reported in public universities such as Johns Hopkins, Penn State and the University of Baltimore, and in private universities such as the University of Phoenix and Dallas Baptist University. The materials cover all possible combinations of topics. The top six success factors identified in the US were:

- motivation (focus on student needs);
- commitment of key people and resources (focus on strengths);
- measurement of progress;
- student and staff enthusiasm;
- provision of an enhanced educational product;
- a programmed approach (complete online courses rather than modules or blended learning).

(OBHE 2005)

It could be argued that the success of wholly online programmes in the US has only been possible there because there is a more mature market for online post-compulsory education. The Pew Survey of the Internet in the US recently found that students there firmly believe that the Internet has enhanced their education (Pew Survey 2006). In response to a slower take-up in the UK, the revised HEFCE strategy for e-development in higher education was wide-ranging and aspirational with a long payback period. (HEFCE 2005). It encouraged universities to continue to progress in the area of e-learning provision on their own, within a supported framework of national advice and guidance from the Joint Information Systems Committee (JISC) and the new Higher Education Academy (HEA). As of 2005, HEFCE had provided funding for 74 Centres of Excellence in Teaching and Learning (CETLs), many of which focus on practice development involving ICT. JISC provides support and funding for innovation and developments in technology and the cost-effective use of ICT; and the HEA provides guidance for developing the e-learning skills of academic staff.

HEFCE's new model for e-learning focuses on developing the e-learning skills of staff. It recommends that universities focus upon enhancing infrastructure to embed practice within institutions across all disciplines and activities, with delivery on or near a campus but at a learner-chosen time and place and with appropriate pedagogy.

Following the report to HEFCE by the Centre for Higher Education Research and Information (Brennan and Papatsiba 2004) the strategy also

stresses the need for further research into how students learn using new technologies. The UK's new policy and funding framework and the proposed model for e-learning therefore privileges blended approaches (part face to face; part interactive multimedia; part self-directed online, etc.). This recognises the student demand for high-quality learning products that make the best use of new technologies. It also identifies additional opportunities provided by e-learning environments for widening access, self-directed learning, lifelong learning, online assessment and student choice at any age. We will return to these two key issues of staff development (changing organisational roles) and student experience later in this chapter.

The Becta post-compulsory e-learning strategy

The FE and schools sectors illustrate the broader approach within which an e-learning strategy can be developed – offering up goals for all citizens, not just students at university or college. Its outcomes directly reflect the six priorities in the Department for Education and Skills (DfES) e-strategy 'Harnessing technology: transforming learning and children's services'³ with one additional outcome specific to the post-compulsory sector: ICT user skills for life. It lists intended outcomes of its ICT strategy as follows:

- Priority 1 An integrated online information service for all citizens.
- Priority 2 Integrated online personal support for children and learners.
- Priority 3 A collaborative approach to personalised learning activities.
- Priority 4 A good-quality training and support package for practitioners.
- Priority 5 A leadership and development package for organisational capability in ICT.
- Priority 6 A common digital infrastructure to support transformation and reform ICT user skills for life.

In the FE context there has been a range of initiatives concerned, for example, with using ICT to support the development of regional centres. At the same time, as already outlined, FE is already in much more direct competition with private providers, particularly for work-based training. The biggest of these private companies, Carter and Carter, has, as of 2006, been buying up smaller competitors. Peter Marples, their group business development director, was reported in *The Guardian* newspaper as saying that his company will be working with colleges some of the time and in competition at other times – 'that is the nature of a mature market' (*The Guardian* 21 March 2006).

This is the local context, then, in which universities and colleges must plan for fully integrating ICT into everything they do. We have already touched on the potential impact of the globalisation of post-compulsory

educational provision. We now need to explore this further. The internationalisation of the HE sector (and the regionalisation of the FE sector), combined with both the increasing diversification of students across different cultures and experiences, and their increasing ICT literacy and demand for quality online provision, signals the need for a new phase of strategic activity. Whether the scale of diversity is relatively local or more explicitly global, universities and colleges are now increasingly dealing with a wide range of students across multiple physical and virtual sites. Institutions will have to consider the implications for student experiences and stakeholder relationships. They will have to explore how to develop the new kinds of academic and administrative roles required of staff so that they can engage with curriculum development and delivery on a potentially global scale, with all that implies in terms of 24/7 tutorial and administrative support, hybrid means of delivery and different cultural norms, educational methods, quality control and regulation. Here, again, the key e-business issues are customer focus, organisational integration and common standards. To complete this chapter, we will look briefly at each of these issues in turn.

Changing students, changing services?

It has already been noted that the commercial organisations who have come to educational services 'afresh' (such as Phoenix or NextEd) are well aware of the importance of customer focus and have invested in new types of 24/7 telephone, email or conferencing-based student support systems as a central component of their services. This has implications both for traditional patterns of teaching and learning, and for conventional academic/student services/administrative roles. In addition, it suggests that we can still find out more about how different students learn effectively, and what sorts of educational support they need at various stages of that learning. The Learning Sciences Research Institute (LSRI) at the University of Nottingham, for example, is developing a research project examining both the operational and cultural issues of supporting students on their Chinese campus at Ningbo (see Box 5.1). Some US universities are explicitly connecting the design of these different forms of educational delivery and development to a widening participation agenda.

At the same time, many institutions are exploring the buying, selling, sharing and reusing of educational content to support students at different locations, across older institutional boundaries and to develop economies of scale. Although many government and other funded projects are still struggling to persuade the HE and FE communities to share educational materials, some progress has been made. For example, the Universities Consortium of e-Learning (UCeL) was founded in March 2002 as a multi-institutional collective to collaboratively produce and share high-quality interactive multimedia resources for health-professional education. Its six

Box 5.1 Learning how people e-learn in China

Project

China has a population of 1.6 billion people. The government sees e-learning technology as a means of providing cost-effective education. Its 68 e-learning institutions, however, have experienced varying levels of success. As part of the Chinese government's initiative to meet this vast social need, the LSRI has been collaborating with Beijing Foreign Studies University over the last three years to discover the most effective methods of learning within 21st-century Chinese culture.*

The work is funded by the HEFCE 'e-China UK' programme. Its remit is to encourage collaboration and mutual understanding between academics in both countries. The programme includes a number of projects focused on the joint development of learning materials and involves other UK universities such as Cambridge, Manchester and Southampton.

Process transformation and project implementation

The University of Nottingham has an established Malaysian campus in Kuala Lumpur and more recently has been operating a physical campus in the City of Ningbo near Shanghai (an area designated for future development). In 2005 it received a licence from the Chinese Ministry of Education to offer undergraduate and masters programmes. It already has 1,000 Chinese students who want an authentic University of Nottingham experience but delivered more cost effectively at the local level – the core aim of the university. The LSRI is helping the university to deliver its courses and safeguard its standards.

Academic activities at Ningbo are processed through relevant teaching committees to maintain the intellectual rigour and depth of the Nottingham brand, but some processes have needed to be changed to comply with local regulations. The LSRI is now being encouraged to build a research centre on the Ningbo campus to extend its joint investigations into the social, scientific and psychological bases of human learning.

As the University of Nottingham looks at infrastructure issues for supporting networked learning across all campuses (such as accessing the library electronically), it is using the LSRI to address questions such as how resources can be linked internationally yet retain a sense of belonging at the local level, and how best to supervise PhD students from the UK. The LSRI is exploring solutions for using technology powerfully but non-obtrusively to enhance processes of teaching, learning and research.

Main challenges

Although academic culture tends to be similar throughout the world, there are cultural and regulatory differences that need to be appreciated across different nationalities.

The LSRI needs to explore the barriers that hinder a joint understanding of how people think and learn and how this differs in the UK and China. The nature of the subject is proving of specific interest to post cultural-revolutionary Chinese society and this is helping the process.

Benefits

- Learning Science is a unique inter-disciplinary subject that brings together Psychology, Computer Science and Education and the LSRI is recognised as an international leader in the type of fundamental research that can address the issues faced by both the University of Nottingham as it expands its international campuses and the Chinese in finding the most efficient methods for raising educational standards across its vast population.
- The group of collaborating institutions is now seeking to design the most effective models for blended learning.
- The LSRI will be promoting an international student exchange programme between the UK and Ningbo.
- The University of Nottingham and the LSRI are gaining strong intellectual benefits by working with the Chinese.

**More information is available from: www.nottingham.ac.uk/lstri and www.nottingham.edu.cn/content.php?d=57 (accessed 9 February 2009).*

founding partners, the Universities of Cambridge, Nottingham, Manchester, East Anglia, Wolverhampton and Peninsula Medical School (Plymouth/Exeter) offer a wide range of subjects supported by UCeL resources: medicine, nursing, pharmacy, behavioural sciences, sports science and health studies.⁴

Similarly, the Learning Resource Catalogue (LRC) is an EDTeC initiative that has been endorsed by the U21 Consortium. The LRC provides the mechanism for academics at the University of New South Wales (UNSW) and other U21 collegial institutions to manage and share their teaching resources online. As such, the LRC represents a means of collegial interaction for the purpose of providing learning resources (learning objects) for students at all levels. When managing their learning resources with the LRC, academics may simply share

the resources within UNSW or, if they wish, they may submit for sharing across the U21 network. Such materials are visible to all LRC users at all institutions.⁵

Others are examining the extent to which learning can be broken down into smaller reusable learning objects (RLOs) or chunks, which can be adapted within different modules and modes of delivery.⁶ Rather than constructing a whole module or course, very high-quality interactive media elements can be designed to be adapted by different teachers in different contexts. One example from one of the collaborators, the School of Nursing at the University of Nottingham, used RLOs to reduce costs in teaching elements of nursing (see Box 5.2).

The importance of staff development

Some of the issues for changing staff roles have already been covered. In addition, as Open University Business School director of programmes and curriculum, Professor Mark Fenton O’Creivy, has noted:

People massively underestimate the upfront effort and production of good quality learning materials [in creating a successful programme].

(Financial Times 20 March 2006)

There are also considerable implications for staff skills and development. This may be in dealing with diverse groups of students from different backgrounds through a variety of media, or exploring the teaching and learning methods appropriate to distance learning. For example, Professor Gilly Salmon (an expert on e-moderation) has produced a staff development programme at Leicester University aimed at helping academics understand e-conferencing (see Box 5.3). Another example was developed by research staff at City University, London, who wanted to improve the productivity of part-time teaching staff delivering a large, open-access evening programme of short courses for adult learners. The existing staff development programme was aimed at full-time staff based on attendance at workshops; instead a virtual learning environment (VLE) was developed ‘not based on the results of deficit audit but . . . from a developmental culture’, which:

must take account of the social and political contexts within which teaching takes place at a time of dwindling resources and burgeoning managerial culture; and (which) should reinforce teacher autonomy and expertise.

(Patel and Mangan 2005: 140)

Patel and Mangan were particularly aware of the difficulties of enabling buy-in among part-time staff for staff development and of defining productivity (both in terms of quality and student retention, progression and achievement). The

Box 5.2 Collaboration reduces the cost of multi-media learning

Project: Reusable learning objects (RLOs)

The project's principal aim was to see how educational institutions could work together to produce high-cost multimedia e-learning materials economically. The partners included:

- School of Nursing, Queens Medical Centre
- Centre for Applied Research in Educational Technology (CARET), University of Cambridge
- Learning Technology Research Institute, London Metropolitan University

Process transformation and project implementation

The educational value of good quality multi-media is well recognised, but typical production costs put them beyond the reach of single institutions. The future, as the School of Nursing discovered, is through collaboration. This began as an informal working relationship between three institutions, which was subsequently formalised as a Centre of Excellence in April 2005 when Queens School of Nursing won HEFCE project funding. This newly formalised partnership is an example of a 'bottom-up'* process of change.

The endeavour had modest beginnings in the mid 1990s when the School started producing Computer Assisted Learning (CAL) packages. The team quickly recognised, however, that these were too long and not easy to use. Heather Wharrad, the project leader, decided that a standard format had to be established with the criterion that any Learning Object had to address a single learning objective. The format allowed for content, interactive elements and self assessment.

This approach became one of the critical success factors because it put a natural time limit on each RLO, improving the quality of learning. Academic staff also found the process easy to engage with compared with earlier e-learning materials. Process evolution led to a series of RLO design templates. This is an ongoing process that seeks to establish the most effective cross-institution pedagogical solutions.

Main challenges

The University of Nottingham's School of Nursing attracts professional hospital staff from nursing practice who enrol for post-registration courses. Typically, these are short eight-week Continuous Professional Development (CPD) courses. The

students need to understand the physiology of new generation pharmaceuticals but may not have formally studied chemistry and biology for many years. The challenge is to prepare these students quickly so that they can assimilate knowledge effectively within a much shorter period of time than full-time undergraduates. At the undergraduate level, the School is preparing RLOs for teaching statistics, which some nursing students find difficult but which will be adaptable to meet the requirements of different subject disciplines in the other partner institutions.

Having shown that its RLOs work well at the micro level (ie in a single subject discipline within a single institution) the School now has to prove that the materials can be reused by the other partners for their own teaching contexts as well as having broader value when made accessible through a digital repository (macro level). Collaboration is essential if a learning object is to have genuine cross-institutional value.

Another challenge of collaboration is to define ways of working so that the most suitable partner is identified for developing a particular Learning Object. Each partner then works from a position of strength.

Benefits

The Pharmacology RLOs are now being used nationally and internationally as the school is receiving positive feedback from across the UK, Paris and Dublin. The CPD courses currently run six times a year in five different centres.

The next step is to extend RLO best practice and share the benefits of collaboration by attracting more partners from both the FE and HE sectors. Eduserv Foundation funding will help accelerate this process. Future RLOs will focus on issues such as Infections Control and Prescribing.

The School has now employed a full-time Learning Technologist. The expertise of the technologist has helped the School avoid making mistakes and so contributed to the bottom line as well as enhanced team working with academics.

*See www.rlo-cetl.ac.uk

Box 5.3 Uniting online immigrants and digital natives**Project: Developing a staff development programme, University of Leicester**

Many hold the view that technology is the key to creating a successful online learning environment. When the University of Leicester recognised that communication and collaboration were such important factors, it introduced a structured staff development programme to achieve a successful online capability.

Process transformation and project implementation

According to Professor Salmon,* working online with groups creates both a psychological and sociological environment that is different to that experienced in face-to-face teaching. It is a more democratic environment where time operates differently. Academic staff that are new to online teaching need to know how best to exploit the medium and this demands new skills.

In the early days, training focused on menu items within a VLE rather than on how to teach, support or interact with students. Staff used notice boards to encourage discussion but without any mechanisms to make this happen. In face-to-face teaching these highly capable people would structure activities and pace them, give feedback to students and enable groups to work together.

Since online teaching requires new skills, the University organised a staff development programme that includes both formal and informal training. For example, the university's 'Certificate in Academic Practice' course, which all new teaching staff have to complete, now includes a major section about teaching online. Less formal courses are also run to help staff born before the digital generation (immigrants) and those born into it (natives) to acquire these skills and prevent a divide developing between them.

The training shows staff how to choose media for different educational purposes and how to exploit the massive amount of online resources, and provides a framework for managing people's behaviour, but most importantly how to operate in online groups.

Main challenges

The key challenge was to bring about a cultural change. New skills cannot be achieved in a half-day training course. This involved engaging in discussion about what people understand about learning and teaching. The University had to deal with subject groups such as fine art, sciences and others who had very specific views about how teaching should be delivered.

Benefits

- Students at Leicester who attend formal lectures benefit from much greater flexibility with 24/7 broadband access to learning resources.
- The University found that an old method of learning, the case study, developed by Harvard University for its MBA course, works far more effectively in an online environment where students engage more deeply with resources and gain a much better understanding from the case study.
- When a lecturer in engineering became Pro Vice Chancellor but wanted to continue teaching to second- and third-year undergraduates, he started putting his material into a VLE and used a bulletin board for student communication. This has produced better examination results year on year since 2003. Now the Pro Vice Chancellor is adding mobile learning to the mix by developing an MP3 file for the VLE, which is updated every week. Students download the file to their iPods and listen to his new assignment instructions when, for example, travelling on the bus to the campus.
- Leicester Online has 7,000 students, who are primarily based overseas. All their learning resources are delivered through a VLE, which is transforming the students' ability to study – and it is not a second-class experience.

** More information about Gilly Salmon's work can be seen by visiting:*

www.e-tivities.com, www.le.ac.uk/beyonddistance, www.atimod.com,
www.atimod.com/research/learningfuture2009.shtml (accessed 9 February 2009),
and www.e-moderating.com

resulting online staff development product (Ambient) was thus able to allow staff to relate to their own particular interests, performance and needs, and to learn 'just in time' rather than as part of the academic calendar.

Using new technologies effectively

The e-business model emphasises the importance of common technological standards for common processes. The University of Nottingham, for example, developed two portals, one aimed at prospective undergraduates (winner of the UCISA Award 2005) and one at prospective postgraduates, to enable it to communicate effectively with applicants and students. These portals are integrated with the Nottingham-based website to explicitly link and offer equivalent sets of student experience. Links to the Malaysian and China campuses are also available from this top level of the website.

At the more local level, Tamworth & Lichfield College was asked to become the Virtual Learning Centre for the Staffordshire region, to share e-learning infrastructure and content. In this case the main challenge was to integrate effectively with learndirect (see Box 5.4). Here, the College had to develop interoperability between non-common systems.

Education, business and the marketplace

In a 2006 *Financial Times* report, the newspaper compared distance learning providers for the MBA; worldwide the University of Phoenix came top with 40,000 students a year, the Edinburgh Business School at Herriot-Watt University second with 8,922. Both of these have rolling programmes, with new recruits taken on each week. At number 24 was the Euro MBA consortium with 35 students a year, based on six residential weeks across Europe. This, then, represents a range of activities and approaches (*Financial Times* 3 March 2006).

Hilsberg argues that as the HE sector becomes increasingly 'marketised' (whether it wants to or not), the issues of global competition and changing institutional roles will become much more central to UK university and college decision-making. David Collis, whose overview of new commercial entrants into education was summarised at the beginning of this chapter, proposes that the demands of the corporate market have enabled new commercial providers to develop faster, more responsively and to build better capability than conventional providers. And he says:

Two important conclusions can be drawn. [...] The first is that the direct competitive threat to most of the traditional offerings of colleges and universities will be delayed. Instead entrants are largely focused on the corporate market and graduate training level, and at only slightly lower prices. This is the good news.

The bad news is that well funded competitors, often backed by brand named institutions through alliances, will be hard to beat once they are established. First mover advantage that they can exploit, particularly the more rapid development of skills needed to harness the new technologies and develop new pedagogies, will put them in good stead as they gradually transition to compete more directly in the traditional higher education market.

(Hilsberg 2004)

This chapter has highlighted some of the considerable amount of both strategic development and individual project initiatives that are already taking place across the UK. It has shown aspects of the increasing expertise in providing post-compulsory education both regionally and across a global marketplace. Next, we will attempt to put this in the wider context of UK HE and

Box 5.4 Simple college portal adds value to e-learning materials

Project: Implementing a Virtual Learning Centre (VLC)

Tamworth & Lichfield College wanted to establish a community of e-learning and offer an alternative experience to conventional learning.

Process transformation and project implementation

Virtual learning was originally promoted as a concept amongst all the FE institutions within the Staffordshire University Regional Federation (SURF). As a result, the Lichfield campus was set up as a joint venture between the University of Staffordshire and Lichfield College as a centre for e-learning, using learndirect (LD) materials. A niche market was identified and targeted with EDCL and National Tests in Literacy online courses.

One year later, the college was asked to become the VLC for the whole of Staffordshire region because it had developed its own highly robust support systems. It has since gained an additional contract from the University for Industry (UFI) to extend its coverage to Shropshire and the Welsh Borders and down to Surrey.

Main challenges

The LD MLE crashed frequently as it struggled to support students and so Lichfield College set up its own website and loaded LD materials into it. This was the principal success factor. Security within Microsoft Internet Explorer, however, created technical problems. It prevented home learners from accessing course exercises and it blocked pop-ups that LD uses extensively in its materials. Lichfield College website created a more robust learner support system, overcame the pop-up issue and used email for communication between learners and tutors.

From the website, students can enrol online, receive advice and access both LD courses and additional learner resources. The college solved all the technical challenges so effectively that all student surveys show a 90%-plus satisfaction rating. Main challenges for the future will be caused by changes in funding regulations, which will price courses beyond the means of many people who typically enrol on these courses.

Benefits

- The college has experienced exponential growth in online student enrolments.

- The EDCL course runs 12–15 months with a 100% successful completion in 2005.
- The college has amassed extensive experience in relating ICT needs to education.
- High-quality learning materials are better than the college is able to resource cost effectively in-house.
- Excellent relationships between learners and tutors.
- Development of high-quality communication skills.

FE educational provision. How effective are these institutions in using emerging technologies in support of their overall aims and objectives? As the next chapter asks, 'Where are we now?'

Notes

- 1 See Johnstone, S. (2005) 'Trends in North American e-learning'. LearnTec. Online. Available at www.wcet.info/resources/StaffPresentations/2005/LearnTec_keynote.swf.
- 2 See Simon Marginson of Monash University in Rood, D. (2004) 'Online universities failed to make the grade', *Sydney Morning Herald*, 15 November. See also, Michael Goldstein 'The economics of e-learning', in *Teaching as E-business? Research and Policy Agendas*. Selected Conference Proceedings Centre for Studies in Higher Education (CSHE), University of California, Berkeley, 2002, pp.13–20 for an alternative view.
- 3 See Becta. Online. Available at <http://publications.becta.org.uk/display.cfm?resID=37348>.
- 4 See Universities Consortium of e-Learning (UCeL). Online. Available at www.uce.ac.uk/about/Default.html.
- 5 See LRC. Online. Available at www.caudit.edu.au/educauseaustralasia/2005/PDF/B6.pdf (accessed 9 February 2009).
- 6 See *Centre for Excellence in Teaching and Learning (CETL) in Reuseable Learning Objects (RLOs)*, London Metropolitan University. Online. Available at www.rlo-cetl.ac.uk.

Bibliography

- Brennan, J., Knight, P. and Papatsiba, V. (2004) 'Towards a research strategy on teaching and learning'. Report to HEFCE by CHEI, London.
- Christensen, Clayton M. and Raynor, Michael E. (2003) *The Innovator's Solution: creating and sustaining successful growth*. Boston, MA: Harvard Business School Press.