

An Open University for the 21st century

B.M. Gourley

INTRODUCTION

any things have been forever changed by the forces of globalization that have swept the world in the last couple of decades. Higher Education is one of them. It has also been changed by the imperatives of a knowledge society, a society where knowledge increases at an exponential rate and anyone who hopes to succeed must continually update and even retrain or render him or herself unemployable. More than that, in so-called Western economies where labour costs are high, manufacturing and other lower skilled jobs have migrated to other lower cost economies and there is less and less call for lower skill employment — thus reinforcing the necessity of having a larger and larger proportion of the population with education at a tertiary level.

It is important therefore to review the trends sweeping Higher Education — and put them in the context of the social trends that technology has unleashed, social trends which are in the process of not only changing the way in which the world does business but indeed changing the way in which universities — and open and distance learning institutions in particular — will have to discharge their main functions. The conclusion describes some of the ways in which The Open University in the UK is embracing these challenges and pursuing the opportunities.

TRENDS IN HIGHER EDUCATION

It would seem to many observers that we are witnessing a seismic shift in Higher Education. The authors of a book published last year entitled *The*

American Faculty: The Restructuring of Academic Work and Careers (Schuster & Finkelstein, 2006) contend that we are seeing nothing less than a revolution — with profound consequences. "Everything is in play," they write, "as nearly every aspect of academic life is being driven by a host of inter-related developments: dazzling technological advances, globalization that permeates academic boundaries, rapid increase of tertiary students worldwide, expansion of proprietary higher education, a blurring of [the] public/private distinction, and entrepreneurial initiatives on and off campus."

To this must be added the blurring of distance and residential, of full-time and part-time study, dramatically changing government policies on the funding of higher education (with an increasing belief that it is as much a private good as a public good), increasing competition (including competition across national boundaries), and research funding becoming ever more concentrated (in itself changing the very nature of the academic contract). The amazing social changes prompted by the new technologies and media, to say nothing of fundamental shifts in the world economy, are further factors. This last is of paramount importance to Higher Education because at the heart of economic change is collection, dissemination and management of information — historically Higher Education's core social functions (ibid, p. 6).

"Taken together," the authors of the book write, "these seismic shifts are profoundly changing how knowledge is acquired and transmitted... [and] changing the face — even the very meaning — of higher education. The coming change is unprecedented, insofar as the sheer number of forces in play, and the stunning rapidity with which they are shaping academia."

In developed countries, but also increasingly in less developed countries, technology has indeed changed everything. The Internet on its own has been dramatic enough, but as other technologies have advanced we now live in a world where "merchants in Zambia use mobile phones for banking; farmers in Senegal use them to monitor prices; health workers in South Africa use them to update health records while visiting patients" and we realize that although the personal computer helped democratize computing and unleashed all sorts of innovation, it is the mobile telephone "that now seems most likely to carry the dream of the 'personal computer' to its conclusion." (*The Economist*, 29 July 2006).

With this convergence of technologies (including near universal satellite coverage), we can reach people where they are, wherever they are, making learning as accessible as possible. Content can be delivered to laptops, iPods, smartphones, and computer monitors, whatever. This clearly has revolutionary potential for the educational endeavour — and it gives the concept of mobility a whole new meaning. We now have students who are able to delegate one of their number to attend a lecture and podcast it to their classmates; students who can watch the very best academic performers on their internet sites and not suffer less than best at any particular university; students who can access more and

more material on open content sites; students who can take one or more courses at universities across national (and certainly individual university) boundaries; students who indeed learn in whole new ways. These are the students who arrive in the HE environment with different benchmarks from their predecessors and indeed with more choices. These are the students who will drive change in the system — rather more change than our political masters.

The consequences for the system are colossal. They challenge the physical facilities on offer; they challenge the nature of the materials produced — especially those that do not harness the technologies available; they challenge the material produced to match up to the best on open content sites; they challenge curricula as well as learning models; they challenge the very basis on which funding models and much more besides rest. Material that is available on open content sites poses particular questions about how much content should be reinvented at individual institutions (more especially at undergraduate level). Quality benchmarks will start taking account of what is available on open content sites as well.

In a world where the mobility of students is highly prized and projects such as the Bologna Process seek to enhance mobility, in a world too where competition is intense, quality and quality assurance are high on the agenda. Indeed, quality and associated "brand" have never been more important. More and more universities for the first time are hiring marketing specialists and advertising consultants, conducting branding campaigns and generally behaving much as ordinary businesses do in a competitive environment. As students are being required to pay more for education they are increasingly alert to their job prospects and to the economic value of degree offerings. As the realities of globalisation dawn on more and more people, universities are doing more to internationalize their offerings. Employer engagement and responsiveness to employer needs are high on many governments' agendas — and as our respective governments hope to shift some costs to employers, it had better be on universities' agendas as well.

More and more corporate employers are taking matters into their own hands and establishing "corporate" universities where they tailor the material to their own preferred outcomes. Publishers (like Pearsons and Thomsons), technology providers (like Cisco and Microsoft) and a host of others are in the HE market as well.

These trends have profound consequences for the business model upon which universities run their operations — and embracing the unprecedented opportunities offered by our global technology-fuelled knowledge society and embracing collaboration represent major strategies for survival in this new world.

THE DISRUPTIVE EFFECTS OF NEW TECHNOLOGIES

Many would argue that current technological advances rank alongside the Renaissance and the Industrial Revolution in terms of the unprecedented challenge they pose to businesses in a world where history seems to be accelerating and time being compressed. Higher education is no more immune to this challenge than any other sector.

It is useful to ponder just one important trend that these technologies have triggered: amateurs are now generating their own content on Internet sites — for free — and often in collaboration with peers. This trend has prompted a number of commentators to call this the Age of Peer Production.

From Amazon.com (where much of the value comes from millions of customer reviews) to MySpace to YouTube (which Google bought for \$1.65 billion), some of the most successful web companies are building business models partly or largely based on user-generated content. MySpace has 120 million users and, while it is clearly a marvellous social network, it has also taken marketing into totally new territory. Wikipedia has set in train a new way of creating information. This is presenting a major challenge to *Encyclopaedia Britannica*.

And importantly, we are also seeing in MySpace, YouTube, Linux and Wikipedia exemplars of mass collaboration, forms of peer production that entirely change our business models. Tapscott and Williams call their recent book *Wikinomics* with the subtitle, *How Mass Collaboration Changes Everything* (Tapscott & Williams, 2006). John Battelle called his recently published book *The Search* with a subtitle, *How Google and its Rivals Changed the Way the World does Business* (Battelle, 2005). Neither of these excellent books is in any way exaggerating. The technology and the social networks it has spawned have indeed changed everything.

Who would have imagined that millions and millions of people would give their time, uncompensated in monetary terms, to create this amazing library in cyberspace? But then, as John Naughton reminds us in his book A Brief History of the Future: The Origins of the Internet (Naughton, 2000) not a single line of the computer code which underpins the Net is proprietary; and nobody who contributed to its development has ever made a cent from the intellectual property rights in it (p. xii). This is a gift culture and its currency is something different: reputation, expression, whim, whatever it is, it is providing the energy that drives a new kind of enterprise — and it is also making the outcome better for everybody.

One of the attributes (one might even call it a trend) of this new movement is its commitment to openness. Openness was not an attribute that could be applied to organizations in the old economy. Conventional wisdom had it that coveted resources were held close, even secret. That wisdom does not hold true in the new world. The fact is that the sheer complexity of the world and the startling richness of information available make it virtually impossible for any one organization to keep track of everything they need to know. "Today, companies that make their boundaries porous to external ideas and human capital outperform companies that rely solely on their internal resources and capabilities." (Tapscott & Williams, 2006; p. 21).

If peer production is one of the most powerful industrial forces of our time then we in education will have to ask ourselves tough questions about the production of some of our teaching materials, not only because our model is an expensive one but also because it is relatively slow in a world growing so accustomed to the swift satisfaction of consumer needs. In the Higher Education community we are seeing universities subscribing to the open educational resource movement and putting teaching material on the web, free to use subject only to the protocols of the Creative Commons Licences. This is a dramatic contribution to the improvement of educational endeavours where libraries are less than good and access to modern textbooks unaffordable — and it also has the potential to dramatically reorder how universities allocate their teaching activities and hence the costing of such activities.

The mass collaboration that is taking place on the Net is also changing quite dramatically the world of research. We now have the phenomenon of "crowd-sourcing" where companies describe a research problem and put it up on the Web for anybody to solve it. In an article last year entitled "Crowd-sourcing: Milk the masses for inspiration" *BusinessWeek* reported on "Inno-Centive, a social network created by Eli Lilly, where companies like Procter & Gamble and Boeing can pay a steep fee to post the knotty problems they can't solve internally — like a process for the extraction of trace metal impurities, for example. The idea is that individual problem solvers — retired scientists, obsessive hobbyists, university students —might be able to lend a hand. If they solve the problem, they receive a hefty cash reward." (http://www.businessweek.com/magazine/content/06_39/b4002422.htm).

What has this got to do with education? Two suggestions: first — higher educational institutions are going to have to behave more like private sector companies and consider buying some of the start-up companies in educational innovation. We don't have to invent everything ourselves. Second: collaboration has to be at the heart of change, because it is only by collaborating that we can harness the richness of a very large community of scholars and students and share our common wealth.

WHAT IMPLICATIONS DOES THIS HAVE FOR THE OPEN UNIVERSITY BUSINESS MODEL?

The Open University was an early pioneer in the field of open and distance learning, and consideration of some of its history is appropriate.

There is no doubt the University holds a particular place in British history and indeed, Higher Education history, by virtue of its special mission — to be open to people, places, methods and ideas; open, in particular to people who did not have the traditional entry qualifications to university. It was born amidst much scepticism on the part of many people, not the least of whom

were the academics who believed that this departure from the norm would mean a radical drop in standards.

Within a surprisingly short time it confounded all the critics — by focusing not only on the quality of its materials (of whatever media), but also the quality of its student support, with study centres and 8,000 part-time tutors distributed all over the UK. It is doing something right — it received the highest rating for student satisfaction for the second consecutive year in the 2006 UK National Student Survey. The OU also places enormous emphasis on its research in educational technology and pedagogy. Its Knowledge Media Institute and its Institute for Educational Technology are well known all over the world for the quality of their research and their participation in the teams that put together our courses — another unique feature of the operation.

Since its foundation the OU has opened the door to Higher Education for more than 2 million people, achieving over 300,000 degrees. Throughout that time it has been in the vanguard of technological advances and currently over 220,000 people are studying with the OU or with institutions validated by the OU. Of these more than 35,000 are living outside the UK — and more than 10 000 are disabled. More than that, the OU has helped establish other "open" universities all over the world, which have grown at an astonishing rate.

It has been a remarkable achievement indeed — and the OU is not complacent. It lives in a highly competitive marketplace where competition respects no national geographic borders and where technology takes it into whole new paradigms. It faces unprecedented competition.

WHERE IS IT GOING FROM HERE?

The fact is that in many, many ways the OU is much more adapted to the changes in the world than virtually any educational institution. It has a great deal of expertise in a whole range of educational technologies and open and distance pedagogies, it has strong brand backed by high quality and the last few years have seen dramatic changes in the university as it accommodates to the new realities — for example customer relationship management and virtual learning environments.

Its overarching strategy for the future is to grow and strengthen its existing business in three main areas — each with their own business models, market understanding and growth strategies. These areas have been termed OU Core, OU Plus and OU for Free.

OU Core

The OU core business model — to deliver high quality supported open learning — has been developed and refined over nearly 40 years. Delivered originally through the print and broadcast media, it has more recently utilized the

huge advances in technology to deliver e-learning to people they could not previously reach. It is now able to offer UK awards cost-effectively, flexibly and directly to an increasingly diverse cohort of students throughout the world.

But it has to ask itself some hard questions as to how best to deliver "customer service" — appropriate, flexible and sustainable student support — in this new world and how it harnesses this gift culture to enhance student support with peer-to-peer mentoring and collaborative learning models; how it deals with the shifting boundaries between formal and informal learning; how it harnesses the content that is being created on the internet in this remarkable new way. It is already experimenting with incorporating user-generated content into its teaching materials in the professional areas of its curriculum to harness the expertise of students in professional practice.

What we see on the Web are people from all over the world creating communities of interest (some of them very sophisticated indeed) on a whole range of subject matter — and what we need to do is ask ourselves how we harness this energy and recognise the learning — if that is indeed useful to people as they negotiate their careers and lives. OU students have been operating a very lively on-line community for many years, including peer mentoring possibilities. Indeed it has the largest virtual student common room in the world — managing and morphing that for a broader remit is not such a huge exercise.

There are some who remain sceptical about the quality of the learning experience delivered via technology and cite the centrality of the conventional face-to-face teacher-student relationship. Throughout its history, however, the OU has explored and exploited cutting-edge technological innovations to provide a high-quality, responsive and truly interactive open and supported learning environment.

OU Plus

"Working in partnership" is one of The Open University's strategic priorities — and has been from its inception. Our oldest offspring, The Allama Iqbal Open University in Pakistan, was established barely five years after the OU was launched in 1969. It has been wildly successful, with about 1.8 million course enrolments (1 million of these being in teacher education) and 1,400 study centres around Pakistan. The youngest offspring is the Arab Open University which was only established in 2002 and already has 30,000 students throughout Kuwait, Jordan, Lebanon, Egypt, Bahrain and Saudi Arabia.

It has partnerships in both the public and private sectors, helping it produce material, adapt to local context and "internationalize" its offerings — as well as enhance its research capacity and localise student support. It encourages the mobility of teaching staff across the system, by investing more in virtual access, by offering joint degrees, by making offerings to students wherever they may be — while at the same time respecting local differences and the neces-

sity of local support. It is by collaborating across the system that it is finding solutions to meeting the language, cultural and even disciplinary heterogeneity of a global knowledge society.

Such partnerships include educators and Higher Education institutions, donor organizations and governments from countries across the continent to improve health, services and education through targeted programmes. TESSA — the Teacher Education in Sub-Saharan Africa programme — is providing online training on a unique scale to equip educators with the resources they need to teach language, literacy, numeracy and other vital skills. DEEP — the Digital Education Enhancement Project — has so successfully piloted IT as a teaching aid to primary schools in Egypt and South Africa that the programme is about to be rolled out to many more schools in these and other African countries.

Students will increasingly obtain education from both online and campus-based providers and this means that the OU is heavily committed to accreditation and validation partnerships. It is no trivial task to set these up across multiple systems. The language issue on its own is serious enough — as can be imagined. The very ethnocentricity created by the dominance of the English language in the world of the Internet is a challenge. The OU sees it as part of their task to contribute to the creation of a global information society that genuinely values diverse cultures as well as creating a more even distribution of wealth. By setting itself up as a global distance education institution it has to pay attention to this issue.

In this globalized (and highly competitive) world, it might at first glance seem paradoxical that the OU has put partnerships and collaborations at the heart of its strategy. It is almost a cliché to claim that the world is a global village yet it is true, as Elizabeth Lank points out in her insightful book on Collaborative Advantage: How Organizations Win by Working Together (Lank, 2005) that our lives and organizations' lives "are set within a much greater web of connections than any previous generation would recognize", with everincreasing competition. In the past the "unit of analysis has generally been one specific organization and the choices it makes about its own markets, competencies and processes. However, it is self-evident that no single organization can be the best, the quickest, the most cost-effective at everything. Working with others to bring the right combination of skills, experience and resources to the job at hand is becoming a necessity in a world that moves as quickly, and demands as much as ours does today. Information and communication technology has dramatically lowered the transaction costs of collaborating — and it is now much easier to find and connect with a whole range of organizational partners. It is increasingly clear that going it alone is no longer a viable option for any organisation." (p. 1). In short, partnerships and collaborations are a strategic necessity.

OU for Free

And then there is the use of open source material. The OU is already the most significant user of Moodle, the open source course management system or virtual learning environment (VLE), and the launch of the OpenLearn site last year (where a selection of OU material and learning resources is available on the Web, free to use under the Creative Commons Licence protocol) signals its determination to play a leadership role in this new world. This is a £5.65 million project, with state-of-the-art learning support and collaboration tools to connect students and educators. Already almost half-a-million learners worldwide have experienced the free learning materials made available by OpenLearn since its launch in late 2006 and the site can now boast in excess of 2500 hours of free study materials.

This initiative has all sorts of implications for the HE system and indeed the central OU business model, to say nothing of the business models of other universities. It is, however, really significant for the many people far beyond our shores who do not have access to decent libraries, textbooks and educational media. In the science and technology domains where Africa and elsewhere are so desperately short of people educated in these disciplines, it is manna from heaven. It is marvellously consonant with the OU mission and the project has lit fires of enthusiasm all over the university.

Using the "skunk works" approach to bringing innovators together the OU is also currently developing a radically new model for supported open learning — SocialLearn — which is based on the principles that animate the participatory Web, including social media's "user generated content". SocialLearn is envisioned as being an "open marketplace" for learning. By this is meant that organizations such as corporations, universities or groups of educators will be able to participate in SocialLearn to forward their particular end, including direct sponsorship of programmes and research, accredited learning activities, or the creation and licensing of courseware. Individuals will be able to participate to achieve personal, corporate, or government-sponsored learning goals, perhaps receiving government grants or stipends. And, at its most basic, the idea of a marketplace means that participants can make money through their activities, such as the creation and licensing of courseware, performing learning services for others, such as teaching or tutoring. Watch this space!

The fact that The Open University is the first British university to place material on the web should be no particular surprise. The fact that it is actively searching for new ways to create the best environment for individuals to learn, building on rich social interaction with other engaged participants, and a constantly evolving learning environment that incorporates innovative and productive technologies and techniques, whatever their source — should also come as no surprise. The philosophy of open access and technological

innovation is a perfect fit with the founding principles of the OU; one could almost say it is their destiny. The marvellous resonance of the whole open source, open innovation, open educational resources movement with the very name makes it feel like destiny! What better vehicle for reaching more people, in more places, regardless of their previous qualifications?

CONCLUSION

In summary — in many ways this new world of knowledge is now a lot more democratic and open, and the OU mission to bring education to all who can benefit by it ever more possible; to say nothing of bold and exciting and important; a mission that continues to inspire all who have the privilege of working at the OU. This article has given a glimpse of the complexities of running such a large business (with such a large mission!) and there are lessons for all educators and educational institutions in what the OU is doing. It remains a benchmark in the field. Who would have thought 40 years ago when it was founded that the possibilities and potential would have been quite so limitless?

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