Taking Care of Business? The Political Economy of MOOCs and Open Education

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Abstract
In this article John Casey, Open Education Project Manager at CLTAD, reflects on the massive changes underway in open education around the world. Driven by a mix of new technology, idealism, politics and venture capital in a time of increasing economic austerity, the movement has plenty contradictions as well as exciting opportunities. The university sector is changing rapidly and open education is increasingly in the mix as a force to be reckoned with as a change agent. This article provides a wide-ranging and rapid introduction to this exciting field and outlines the implications for changes in our practice as well as the role of Design in providing viable solutions for the future of open education in the arts.

About the Author
Previously John worked as project manager at the UK national learning resource service, Jorum, where he was instrumental in opening up the service to become open access. Before that, John worked as Learning Resource Manager at the University of the Highlands and Islands (UHI) in Scotland, where he worked with academics in adopting flexible learning approaches for remote learners. John has experience in the legal, technical, media design, and staff development aspects of open learning as well as software design and development and has researched and published in these areas.

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Introduction
There has been quite a bit of media interest in MOOCs recently. They are the latest ‘in thing’ in the field of education and technology. In a MOOC, hundreds of thousands of students attend online courses at world-leading universities like Harvard and MIT – for free! What’s going on? University managers are rushing to their teaching Deans, saying ‘We have to have a MOOC!’. When asked do they know what a MOOC is? They say ‘No, but we have to have one! Everyone else is getting one!’. This is despite the dropout rate from a MOOC being around 90%. It’s a bit like the educational equivalent of an arms race. There is enormous advertising and peer pressure on university managers in this area, as this report about a ‘MOOC-induced’ management crisis at Virginia University in the USA makes clear.

As usual, with education and technology, there have been buckets full of hype flung around, not all of it fragrant. Truth is, some people have realized that providing the information and learning resources from inside a university level course is no big deal, if you are organized. Being organized, or otherwise, is really what this article is all about and the consequent reorganization of the academic workplace to support open education. Although the current cycle of activity in MOOCs and open education is being made possible by the internet the real underlying ‘disruptive technologies’ at work here are the 19th century ones of the distance learning correspondence course and the concept of ‘open exams’, about which more later. It is impossible to understand this area of activity without some understanding of the wider social and economic context. So, to get us started, below are some key terms and concepts explained – at least from my perspective.

Terminology

Political Economy
This is the old-fashioned name for the study of economics, when it was also linked to its interactions with society and culture – when it was a more broad based holistic discipline. It is often associated with the famous Scottish thinker Adam Smith, who is claimed by both the right and left of the political spectrum. It is a useful term to use to distinguish an approach that differs from the current prevailing view of ‘neo-liberalism’, which views economics as some a kind of unquestionable automata that dominates society.

MOOC
MOOC stands for Massively Open Online Course. In this educational model access to learning resources and some (limited) tutoring and certification is given for free by established universities to many tens of thousands of students at a time. Two leading examples are Edx, founded by leading American Universities MIT
and Harvard and Coursera, founded by two Stanford University professors with a pile of venture capital funding. Coursera has attracted a lot of interest by offering to allow different universities to use its online system.

**Open Education**

Here in the UK, the Open University (OU), founded in 1969 would be the kind of thing that comes to most peoples mind when they hear the phrase ‘open education’. Founded over 40 years ago the OU was intended to offer university education to people who either did not have the required formal educational qualifications or because of work or family circumstances were not able to attend a ‘proper’ university. More recently, 10 years ago, universities like MIT in the USA started to make their all their undergraduate course learning available openly online, using charitable donations to support the work. There is now a growing international movement doing this and sharing their content openly. About 5 years ago the OU started to do the same thing with their OpenLearn initiative. Both the OU and MIT have reported increased student applications and international collaboration opportunities as a result, together with a wide range of internal benefits.

**Neo Liberalism**

Arguably, the ideas currently dominating society, associated with thinkers such as Friedrich Hayek and having its roots in a deep antagonism to the communist states of the 20th century. The belief that the free market is the best way to organize every aspect of human life, even if it involves massive state intervention to do so. It came to the fore in the 1970's as a political and economic project aiming to reverse the reforms put in place after the Great Depression of the 1920's and 30's. Although it has been severely shaken by the present economic crisis. Like most ideologies, it claims that it is the natural order of things and that: There Is No Alternative (TINA). It continues to dominate current discussions about the role of the state and the public sector in society. In UK higher education this has resulted in reforms aimed at creating a competitive free market, by transferring the costs from general taxation directly to students, while reducing support for arts education.

**The Progress of Open Education**

The OU uses ‘distance education’ methods to overcome barriers to education, in this approach the courses are designed from scratch by multi-disciplinary teams to be used by students that the will may never see. Much more thought is put into the course design and the preparation of learning resources to support the students at a distance as well arrangements to provide tutoring and discussion opportunities and even practical work like workshops and fieldtrips. It works in a very different way compared to a traditional university where courses and teaching can be more ad hoc, as the teachers and students are in frequent contact (or used to be). In a word, the difference between a traditional university course and a distance-learning course is “design”.

Operating distance / open learning successfully is a design intensive activity and requires, like most design-intensive enterprises, a much greater up-front
investment of resources and time. At the OU, a course, typically, will take 7 years to pay for itself. In this educational model a lot of thought is put into the ‘learning design’ associated with each course – a kind of choreography that arranges, organizes and directs the activities of the students together with the learning resources, teachers, other students and administrative systems. In a traditional university course the learning design is there, but is quite ‘faint’ compared to a full-on distance-learning course and is often locked away inside teacher’s heads and buried deep in course handbooks.

There is even a name for this type of educational design activity – it is called “Instructional Design” and is a recognized profession with qualifications and even university level research programmes. It’s a kind of cross between educational research, cognitive psychology, media design and information science. In the UK, in higher and further education at any rate, this term is almost unknown and that conceptual space tends to be occupied by “Educational Developers” who have their own professional and philosophical approach, placing an emphasis on individual teacher development. As a result, Instructional Design is often (wrongly) regarded in the UK as a fairly primitive educational activity that operates at the level of 1950/60’s ‘programmed learning’ developed by behaviourist psychologists. This illustrates some of the obstacles to change in this area – namely professional ‘turfs’.

In the early days of the OU ‘proper’ universities were not exactly fans and some regarded it as a second-class form of higher education that would never catch on. – or even saw it as a threat (rightly as it turns out). Now, the OU has more than a quarter of a million students and is regularly top of the chart in the National Student Survey. An OU degree is at least as highly regarded as a normal university degree and in many cases employers report considering it as a distinctive advantage when recruiting. In the current economic crisis application to join the OU are climbing sharply, with a large rise in younger people entering, due to the lower costs and flexible study opportunities that make it possible to hold a full-time job as well.

**Open Education in the Arts?**

In the field of art education the Open College of the Arts (OCA) was founded in 1987 to do for art education what the OU had done for academic subjects. This too, uses open education methods together with the latest technology to support students to study for degrees in Art and Design who would not otherwise be able to do so. I visited the OCA in the summer of 2012 to discuss possible collaboration on open education projects; the place was a hive of activity, as that day the work of students on one of its courses was being assessed by external examiners. All the student work was laid out on tables and the examiners were in groups involved in intense discussions. Interestingly (to me) many of the students were making use of online book publishing platforms, especially Blurb as a tool to present their portfolios.

When the OCA started it to, like the OU, experienced some hostility from the established art college sector and was told by some that it ‘would never work’.
Now, 25 years on the OCA is still going and its student numbers are increasing for much the same reasons as those at the OU.

Elsewhere in the world open education in the arts is also gaining ground. In North America the concept of a low-residency Masters degree in studio-based subjects is well established, examples are; Goddard College Vermont (one of the first) and Emily Carr University, Canada.

**Open and Distance Learning in UK Higher Education**

From the 1990’s onwards with the rise of computing power and the internet the UK higher education sector increasingly tried to use technology (usually under the banner of ‘e-learning’) to make its teaching more flexible and (the holy grail) more efficient and of a higher quality. But despite these efforts, the progress made has not resulted in a breakthrough change.

This was recognized by a government study in 2011, in the HEFCE ‘Online Learning Task Force’ report entitled ‘Collaborate to Compete’. A title that neatly sums up the ideological quandary that neo-liberal thinking about education currently finds itself in. The chair of the Task Force, Dame Lynne Brindley, said:

‘The HE sector has been talking about the potential of online learning for well over 10 years. The moment has come to move online learning more centre stage. Only by doing this will UK higher education remain and grow as a major international force. Our report offers pointers towards achieving this goal.’

Back in 1995 (16 years before the HEFCE report) Terry Mayes, an educational researcher wrote an article called ‘Groundhog Day’, named after the Hollywood film of the same name - where the hero is doomed to endlessly repeat the same day of in his life until he changes his behavior and breaks the cycle of failure. In his article Mayes looks to the future of education and technology and makes these, observations:

“Thus, there are good reasons for supposing that today’s learning technology will this time lead to radical change in education. Yet doubts remain. For one thing education is a social and political system, and the checks and balances that keep the system working may not be shifted by any technology.”

Terry Mayes puts his finger on the problem that has held back progress in this area – the lack of engagement with the social and political aspects of using technology in education. The e-learning ‘scene’ in the UK has tended to concentrate on the technological side of things. Over the last twenty years or so successive governments have spent £billions in this area without achieving the breakthrough expected, the collapse of the UK e-University in 2004 being a notable and very public failure that epitomized these trends.

As a result of this lack of progress there is a growing commercial (mainly USA based) presence entering e-learning in UK higher education and doing deals with
universities to convert their courses into distance learning versions, and in some cases operating the courses on their behalf. The HEFCE report mentioned earlier also identifies these trends. The growing extent of these developments is revealed in this BBC report. Thus, private sector e-learning and publishing firms are stepping in to fill the gap in learning design expertise that currently exists in the UK university sector. It also represents the de facto inability of some universities to change internal administrative structures and working cultures to accommodate the new working practices required by open learning.

Commercial degree-awarding organisations are also rapidly entering the UK higher education market – according to the THES there are about 94 commercial providers currently offering undergraduate study and qualifications in the UK. The genesis of these developments can be traced back to international trade agreements signed by the UK about 10 years ago (the WTO GATT) that opened up the education sector to international markets. The London based Observatory on Borderless Higher Education is an excellent source of information and analysis about these trends and some of their online publications are listed below in the reference section.

Drivers and Trends Towards Open Education
To meet the worldwide demand for higher education from people who already have the required qualifications to enter university there would need to be a major university commissioned every week. This is according to Sir John Daniel the head of the Commonwealth of Learning, an international association representing distance learning institutions in over 50 countries with a combined population of 1.7 billion people.

This growing crisis of access, cost and flexibility in higher education is not just a problem facing the developing world; here in the UK the huge rise in student fees is an obvious factor. In the USA the cost of college textbooks has become so expensive that it is actively stopping poorer students from going to college. This has resulted in the Open Textbook movement, which is successfully challenging the conventional educational publishing business. In this model, experts are commissioned by state authorities to write textbooks to support popular college courses and the book is made available for free online in PDF format and also from print-on-demand services – at drastically reduced costs to the students.

In several US states, the educational authorities are now mandating that colleges adopt Open Textbooks for their largest college courses to reduce the costs to entering study. Support for this crosses the political spectrum, including Arnold Schwarzenegger, the republican governor of California, where potential savings are predicted to be in the order of $400 million a year. Elsewhere, the international Open Textbook movement continues to grow in South America and Africa, with Poland recently announcing a national $12 million program in 2012. Back in the USA, the Obama administration is now halfway through spending $2 billion dollars on creating free open educational resources to support the college sector.
A crucial enabler of the worldwide open education movement has been the introduction of a simple, effective and easy to understand way of managing copyright in the online world of the internet. The Creative Commons licensing system was introduced 10 years ago to make it easy for people (especially those in the creative industries – hence the name) to make the most of the new internet medium to disseminate their work, while still affording them legal protection. This has become the standard means to licence educational resources on the web, and is like the ‘legal oil’ in the international open education machine, you can find a handy introduction to the system at this link.

Internationally, the momentum towards more open education continues to build. In Paris on June 22, 2012 UNESCO held a World Open Educational Resources (OER) Congress, with delegates from all over the world. This resulted in the adoption of the 2012 Paris OER Declaration. Various countries are in the process of signing up to this. The European Union has announced the intention to provide substantial support for open education as part of its long-term economic recovery plan.

**Tackling TINA: Change in the Academic Workplace?**

We can see a trend in the progress of open education in the UK higher education sector in the stories above, about the Open University and the Open College of the Arts. The trend goes from an initial indifference and even hostility, followed by growing success and acceptance (eventually). While at the same time, mainstream higher education institutions struggle to slowly implement open and distance learning (ODL) techniques.

Of course, not all open education has to be like the OU or the MOOCs. There are degrees of ‘openness’, and we might also usefully use the term ‘flexibility’. It is probably much more realistic to aim for increasing flexible learning opportunities in mainstream higher education. Flexible learning, in terms of place and time of study for students is a big step forwards in our institutions. But, this still faces substantial obstacles, although it was supposed to have been delivered by the adoption of e-learning long ago. As Terry Mayes indicates above, the real problem here is social and political, not technical, the resistance to change amongst academics and universities is legendary, they have their own version of TINA (There Is No Alternative), having operated largely unchanged since the Middle Ages - they can be very stuck in their ways.

But, faced with student demands for more flexible learning (while they work to pay off their costs) even the entrenched lecture system is beginning to change, with increasing amounts of lectures being recorded for flexible access. Although still in a minority this is a beginning, although the idea of a having a ‘canned’ set of lectures (edited for high quality) and doing away with the traditional lecture format is still seen as dangerously radical and undermining the profession of teaching. The student and parent perception of this as a reduction in ‘contact’ hours is often given as a reason for not pursuing this strategy. However, to counter this there is the growing concept of the ‘flipped’ lecture or class. In this model ‘face time’ is seen as too valuable to squander on mere information
transmission, which is more efficiently delivered by well made ‘canned content’. Instead, lecture and class time is occupied with activities and discussions. This model is known as the ‘flipped classroom’ and shows how open learning techniques are increasingly penetrating traditional education:

“This is what’s known as the flipped classroom model. A lot of the lecture and topic-related materials are posted online, and students can review these on their own time. Then, during class, the focus is on hands-on exercises.”

Vijay Kumar
Director of MIT’s Office of Educational Innovation and Technology

In many ways art colleges are no different to the rest of the higher education system when it comes to developing and delivering open education. If medicine and dentistry can operate distance-learning programmes, then so too can art. The main obstacles here, are the same as elsewhere, what Thomas Kuhn, writing about scientific revolutions, described as ‘tradition, dominant groups and vested interests that can delay and obstruct the adoption and dissemination of new knowledge,’ we might also add to that list, surprisingly, sometimes, a lack of imagination.

This year at the UK Higher Education Academy (HEA) conference Martin Bean, the Vice Chancellor of the Open University gave a great lecture about how open education can play a part in renewing our institutions. Above all, he stresses how this makes good business sense in the rapidly evolving international education market and should not be seen as some optional ‘good’ work. It is recommended viewing for all, especially senior managers trying to work out a strategy for the future – if you are short of time drop into the video at 42.00 on the timeline.

**MOOCs and the 19th Century - Back to the Future**

Coming back to the topic we started with – the MOOC. We can see now that it is really just a very large-scale distance learning course that leverages the ability to organize course information effectively online, as well as providing some testing. Despite some justified skepticism, this is a big development – if only in scale. It does forcefully demonstrate that an educational model built on mere access to information (the traditional one that is still widespread) is going to struggle to be economically viable in the internet age. Our current higher education system is built on a model of information and economic scarcity that dates back to the Middle Ages, what is emerging is a post-scarcity model of education that is rapidly developing.

The backers of the MOOCs of Coursera and Edx and UDACITY etc. have realised that the real value in a campus education is the invisible stuff that happens between people (the dialogue, support, institutional culture, support systems, physical spaces, fellow students etc., i.e. learning and teaching as ‘process’ not information). In business terms this is what can be described, as the low-volume, high-margin product called ‘campus-based university education’ – which universities hope will continue. In addition, entrepreneurs and institutions have
realized that they can wrap around this campus-based model another layer of educational experience in the online realm, which largely relies on the presence of well-organized information. This might be described in business terms as a high-volume low-margin product.

It is a genuine experiment, and a piece of educational entrepreneurialism; everyone knows the education system has to change and technology will be involved. Here is a real scenario that is already developing (very similar to that explained by Martin Bean from the OU above): What might be called ‘2nd tier university learning’ with the provisions of a certificate of attendance by the initial provider (paid for by a small fee – say $10 – the Edx model). Even with 90% dropout rates a 100,000 student MOOC would generate $100,000 in certificate fees at $10 a pop – a useful amount of income by any standards. Those who successfully finish the MOOC can then apply to be examined by an accredited qualification provider.

In the USA this is already happening with VUE Testing, a subsidiary of the publishing giant Person (who also own the UK Edexcel examination board), charging $89 for secure online examinations for students completing the MOOC course ‘Introduction to Computer Science’ provided by UDACITY. This then becomes a credit that can be ‘cashed in’ with various universities to count towards a degree qualification. In this model the cash generated by the surviving MOOC students jumps to $100,000 + $890,000 = $989,000. When official, state-sanctioned, certification is added to the mix, this single semester course becomes a potential $1 million dollar cash machine for the providers.

Lurking in the background to all this and in many ways far more radical is the University of London External Programme (now called the International Programme) that dates back to the about 1858. This pioneered distance-learning techniques in the UK and also offered the opportunity to just pay for sitting exams to gain an outright full degree from the University of London. At the time, this outraged traditionalists like Cardinal Newman (seen by many as the father of the ‘modern’ campus university). This model still operates today with about 4,500 students in the UK studying in this way (and about another 50,000 studying from abroad) with a total cost of gaining degree in this manner being about £4,000 – including access to learning resources and online discussion forums. This makes even the MOOCs look a bit tame!

Open Education in Art Colleges: A wicked design problem?
From a design perspective the problem for art colleges (and universities) might be broken into these components:

1. Learning Design Skills
   a. Pedagogic Foundations – Knowledge and Skills
   b. Visualisation and Conceptual Tools
   c. Procedural Tools
   d. Communication Tools
   e. Authoring Tools
2. System (Re)Design
   a. Policy
   b. Management
   c. Technology
   d. Support Services
   e. Information and Resource Management
   f. Administration
   g. Strategy

None of these are trivial problems and they are deeply embedded in complex systems, with solutions that are not easily transferred to other contexts. This kind of problem is sometimes referred to as a ‘wicked design problem’. All of these problems make interesting design projects.

The highly personal and practical nature of art and design does, however, present challenges to open educational approaches. As Mark Clough from Batley College of Art and Design explains:

“Again, for those new to art and design subjects, it should be borne in mind that each student is endeavouring to find their own 'voice', so much teaching is on a one-to-one basis rather than through mass-delivery to a class whose members are expected to hold a common, single view. For example, a course teaching people to become opticians would want every student to have the same understanding of their subject - there is no room for an individual ‘take’ on how the laws of optics work. The reverse is of course true for arts subjects - society requires that practitioners create an individual view of things, and it is this uniqueness that is valued.”

Mark Clough, Kirklees College

However, we can see some exciting developments, here at the UAL and elsewhere in open arts education. The gradual development of the Process.Arts community web site at the UAL represents a grass roots move towards a more open mode of practice and acts like an informal space for collaboration in the world of the UAL that is reaching out increasingly to other online arts communities. Meanwhile the UAL ALTO projects are learning more about digital resource management and developing policy to support these activities as well as developing some practical solutions to the learning design tool problems identified above. At Coventry School of Art and Design, who are working with the UAL on planning further open education collaborations, there are also some daring experiments in teaching ‘in the open’ with undergraduate open online classes in Creative Activism and Photography. The future of open arts education is going to be interesting.
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References and Further Readings
GATS, Trade and Higher Education: Perspective 2003 - Where are we?
Author: Jane Knight, Ontario Institute for the Study of Education, University of Toronto, (Canada). Available at: http://www.obhe.ac.uk/documents/download?id=698

The Open University – Facts and Figures


Highly Recommended Further Reading


Also available at the online magazine Change: The Magazine of Higher Learning: http://www.changemag.org/Archives/Back%20Issues/March-April%202009/full-iron-triangle.html