

CHAPTER 5

MOOCs

Beware of the man who works hard to learn something, learns it, and finds himself no wiser than before. He is full of murderous resentment of people who are ignorant without having come by their ignorance the hard way.

—Kurt Vonnegut

Introduction

Having looked at a long established practice of open access publishing in Chapter 3 and a relatively stable approach of OERs in Chapter 4, this chapter will consider the rapid and rather volatile world of MOOCs. No subject in educational technology in recent years has generated as much excitement amongst educational entrepreneurs and angst amongst established academics as MOOCs. If open access represents the clearest case for the argument that openness has been successful, then MOOCs are probably the best example of the second strand of this – that the battle for the future direction is now occurring.

It was MOOCs after all, and not OERs, open access or open scholarship, that caused veteran elearning expert Tony Bates (2014) to despair, ‘I can’t express adequately just how pissed off I am about MOOCs – not the concept, but all the hubris and

nonsense that's been talked and written about them. At a personal level, it was as if 45 years of work was for nothing.' Why should this be so? What is it about MOOCs that causes despair and excitement in equal measure? This will be the subject of the next two chapters, concentrating first on MOOCs themselves, and then on the media interest around them in the Chapter 6. MOOCs can stand as a microcosm of the issues in open education, because it is with open courses that they are brought into sharpest relief.

This rapid growth of MOOCs can be demonstrated by comparing their internet interest with that of OERs. A simple use of Google Trends reveals how interest in MOOCs has grown, comparative to OERs (see **Figure 4**).

While OERs have had steady growth since 2009, indicating an increased awareness, MOOCs arrive seemingly from nowhere in late 2012 and rapidly overtake OERs. This plot emphasises the point made at the end of the previous chapter regarding the sudden media interest in MOOCs. However, to put it in perspective, we can also plot MOOCs against a subject that has wider public awareness. Zuckerman (2012) jokingly suggests using the US celebrity Kim Kardashian to act as an indicative measure of internet attention. **Figure 5** shows this comparison, and because Google Trends normalises the Y-scale so that it is showing relative interest rather than absolute number of searches, the rather sobering evidence is that in this plot, MOOCs don't even register.

There are two interesting aspects of MOOCs from the perspective of the battle for open. The first is what they are, the opportunities and threats they pose and the type of openness they afford. The second is the media interest in them and why they find resonance with a certain type of narrative. This chapter will deal with the first of these, looking at the history, benefits,

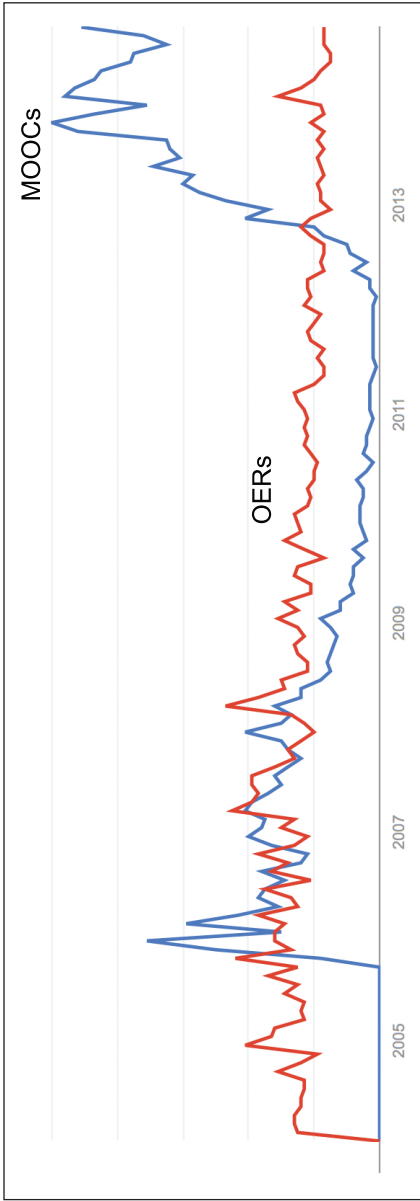


Figure 4: Google Trends plot of relative interest in MOOCs and OERs.

Source: Google Trends <http://www.google.com/trends/explore#q=moocs%2C%20OERs&cmpt=q>. (7th September 2014)



Figure 5: Google Trends plot of relative interest in MOOCs vs. Kim Kardashian

Source: Google Trends <http://www.google.com/trends/explore#q=moocs%2C%20Kardashian&cmpt=q>. (7th September 2014)

commercialisation and pedagogy of MOOCs. The next chapter will examine the second issue, that of narrative, in detail.

MOOC Background

MOOCs are a topic where a number of people can lay claim to being the instigator. What counts as a MOOC is open to interpretation. People had released content previously, either as part of the OER movement or independently, and this could be in the form of a whole course. However, there was a coalescence of interest around running open courses from a number of people associated with the open education movement. David Wiley ran a campus based course in 2007 and made it open to anyone online to participate, as did Alec Couros, operating an 'open boundary' course. However, the title of founder is often given to Connectivism and Connective Knowledge (CCK08), run by George Siemens and Stephen Downes, in 2008. It was commentary on this course that gave rise to the term MOOC, jointly attributed to Dave Cormier and Bryan Alexander.

There are familiar names in this list of early MOOC providers because MOOCs can be seen as a logical extension of the open education movement. What characterised these early MOOCs was an interest in the possibilities that being open and networked offered. The subject matter of these early courses was related to the mode of presentation, so courses were in topics such as open education, digital identity or networked pedagogy. As with early elearning courses, which would often be about the subject of elearning itself, these early stages of experimentation focused on subjects where the medium was the message. But as with elearning, this soon broadened out to encompass all topics.

Another characteristic of these early MOOCs was that they were associated with individuals, not institutions. They were seen as George and Stephen's course, rather than a Stanford or MIT course. This meant that they were experimental in terms of technology, both by necessity and design. These MOOCs used a combination of open technologies, such as WordPress and Twitter, some institutional hosting through tools such as Moodle, and even some self-created tools such as Stephen Downes's gRSShopper. Learning to use these tools and to make connections across the open internet was seen as a key aim for these early MOOCs.

Then in 2011, MOOCs took a very different turn when Sebastian Thrun launched the Stanford Artificial Intelligence course, with over 120,000 enrolled learners. This attracted much attention from the media and venture capitalists. With the cost of formal education soaring, the idea that you could take courses from the top universities for free seemed irresistible. Harvard and MIT created EdX, Coursera was launched by Daphne Koller and Andrew Ng with venture capital funding and Thrun founded Udacity. The year 2012 was deemed 'Year of the MOOC' by the *New York Times* (Pappano 2012) as most major US universities signed up to one or other of the main providers, or launched their own courses. MOOC mania was not restricted to North America: in the UK the OU launched FutureLearn in 2013; in Germany it was iVersity; and in Australia, Open2Study. Coursera is the most prominent of the MOOC providers, and it has over 500 courses from 107 universities and over 5 million learners enrolled (Protalinski 2013). The pace of uptake, hype and development seemed breathless in comparison with most educational projects.

These new MOOCs were very different from the early ones pioneered by the open education movement. They tended to be institutional, based on a proprietary platform and driven by a

strongly instructivist pedagogy. Whereas the initial MOOCs had emphasised the importance of networking, many new MOOCs were focused on video instruction and automatic assessment. The distinction was made between cMOOCs for the early, connectivist type MOOCs and xMOOCs for the new, didactic models (Siemens 2012).

Before we examine the impact of this commercial aspect on the nature of openness in MOOCs, it is worth considering some of the positive aspects of the rapid increase in profile for open education and elearning in general. For many educational technologists who had strived for years to get fellow academics or senior managers interested in different aspects of open education, MOOCs provided a means of getting attention and funding. As Siemens (2014) puts it, 'if education was grunge, MOOCs were its Nirvana,' the breakthrough act that gained attention. It might be incorrect to cast the global education movement as a fringe movement such as grunge rock, but MOOCs certainly accelerated the attention and interest in open education.

Such increased profile can be both a blessing and a curse, particularly when it follows on the back of hype about revolution in higher education. But even setting aside the possibly dubious benefits of suddenly becoming the popular child in class, MOOCs are important because they raise a number of issues for educators, and – crucial to the theme of this book – these issues arise directly as a result of the open nature of MOOCs. In the following section, three of these are addressed. These are not the only issues raised by MOOCs, nor is this an exhaustive coverage of them – course design and pedagogy could form a book in itself. The intention here is to illustrate how the open nature of MOOCs causes fundamental questions to be asked about accepted education practice.

MOOCs and Quality

The first such issue is that of quality and how it is measured. Formal higher education has developed a set of quality measures based on a specific relationship between the education provider and the student. That relationship is fundamentally altered in a MOOC, and so these existing measures are not applicable.

Let us consider why we measure quality. Largely it is to verify that aims and intentions have been met. The aims of the institution may be to have a sufficient number of students, for them to stay with and pass the course, and for the institution's reputation to be upheld. The educator in charge of the course may have similar aims, along with those of a professional interest in exploring the possibilities afforded by MOOCs. The student will have the aims of learning what they set out to, passing the course, enjoying the experience and gaining useful skills.

We therefore develop quality measures and procedures that monitor these intentions. These could be student completion rates, student satisfaction scores, external assessment of course content, checks against external benchmarks, etc. In a MOOC many of these intentions are altered, either radically or subtly. At the moment it's not entirely clear what the intentions of institutions are in relation to MOOCs – is it to attract more formal students, to provide a public good, to make money? In this early stage it might be a confused mixture of all of these, combined with a need to appear to be doing something. For educators, the intention might be experimentation with curriculum or pedagogy, improvement of their personal reputation or personal development.

A more interesting difference arises if the intentions of the learner are considered. While some of the original aims may remain, for instance, it may help in career development, others are

exaggerated or absent. The need to pass the course, for instance, is drastically reduced, because progress on to subsequent courses is not dependent on it, and most importantly, because there is no financial commitment and the personal interest in learning is heightened. In conventional courses there will be a wide range of different types of learner, but in MOOCs, the presence of what are termed 'leisure learners' is much higher than normal. They're nearly all leisure learners – they don't have to do this after all, it's something that is competing with leisure pursuits. A whole new class of learners exist in MOOCs that you rarely see in formal education. These are what we might term drive-by learners (after Groom's 2011 'drive-by assignments'). These are learners who are signing up because they can. It costs nothing to sign up; they can take a look, see if they like anything and move on. They may dip in and out over the course, taking bits they find engaging, or they may not even turn up at all. In formal education the financial and emotional commitment is much higher, making drive-by learners very rare. Kizilcec, Piech and Schneider (2013) used analytics to differentiate four types of MOOC learners: completing, auditing, disengaging and sampling. Although a comparison of these four types with formal learners has not been completed, one could assume that the commitments required to continue in formal education reduces the likelihood of sampling and auditing students, with the emphasis on completing.

If we consider these new types of learners and their intentions, then the existing quality measures don't map across satisfactorily. For instance, very few of these learners have course completion as a major goal. And progression on to other courses is not yet a metric in a pick-and-choose world, although we will undoubtedly see increasing pressures to make MOOC learners persist with a particular brand of MOOC provider, just as we see this with

computer or phone providers. With such a broad range of learners, MOOCs find themselves up against a tough comparison with formal education. To use Weinberger's (2007) phrase, higher education 'filters on the way in', whereas MOOCs 'filter on the way out'. The quality measures are therefore very different. Student satisfaction rates for a system that has completely open enrolment and filters on the way out are unlikely to compare favourably with a very different system where there has been a filtering already. Filtering on the way out and operating in the open does, however, allow for new types of quality measures. These could be altmetrics-type measures (what kind of 'buzz' does it create, what is the public reaction of participants) or analytics (how many people come back, what is the dwell time, bounce rate, etc.). But the comparisons should be with other MOOCs, not with formal education. Quality, and what is measured, is therefore just one example of established practices that the attention on MOOCs should make us reconsider.

MOOCs and Cost

A second issue that MOOCs raise for formal education is that they force an examination of the costs associated with teaching. Estimates of how much it takes to produce a MOOC vary, with Udacity budgeting US\$200,000, EdX US\$250,000 (DeJong 2013) and University of North Carolina estimating US\$150,000 for their Coursera MOOC (Goldstein 2013). Once created, the idea is that they can be run at next to no cost, although this will depend on how closely involved the lead academic is in each presentation. Clearly if you are not charging fees for people to study on a course, then its presentation costs need to be low if it is to be a sustainable model. As we saw with OERs, there are different models of

sustainability, and seed funding is often required, but eventually such approaches need to stand on their own.

The costs of elearning in general (not MOOCs) has been analysed by a number of researchers (e.g. Bates 1995, Weller 2004). Costs can be divided into production, i.e., those costs associated with creating the course material and any associated resources, rights, etc., and presentation costs, those associated with the delivery of the course. Generally the production costs are fixed, particularly in elearning, so they don't vary with the number of students, while presentation costs are variable, so they increase with the number of students. The key difference for MOOCs is that in order to achieve the scale they desire, while remaining free to study, this model is not viable. Presentation costs for MOOCs need to be close to zero.

The basic model of MOOCs is that of unsupported learning; in cMOOCs this support is replaced by a peer network, in xMOOCs, by automatic feedback. At the Open University, ratios for course production and presentation costs over five presentations, averaged across disciplines, are estimated to be about 1:3. That is, the presentation costs are the most expensive element, once the initial production costs have been invested. This is largely made up of salaries paid to part-time tutors to support students, but also other generic and specific student support services, e.g. support for students with disabilities, pastoral support, helpdesk costs, running regional centres, etc. This illustrates that by far the biggest cost is that of tuition. Paying people to support learners is the costly part of education.

In order for MOOCs to be viable they need to remove much of these presentation costs. The question that MOOCs make higher education ask of itself is, what value is this set of costs to learners? Many of the services it represents are the key to long-term success

for learners. The need for these may not be evenly distributed, though. Some learners hardly ever avail themselves of these, don't require tuition and do very well studying on their own. Other learners require a lot of support for various reasons and probably have more than their 'fair' share of these services (i.e., more than they've actually paid for). And most are in the middle; they make use of them sometimes, depending on circumstances.

For distance education in particular, this first group, the confident, independent learners will probably cope well with MOOCs. They probably represent the 10% or so who complete MOOCs. Then there are some for whom no amount of support can help them through, either study isn't for them or this is the wrong time. But sitting in the middle is a substantial group who need varying levels of support to 'survive' a protracted course of study.

But that doesn't necessarily mean that universities shouldn't look at ways of reducing the cost of presentation. This highlights the dilemma for universities – many students may not think they need these services, but they are essential for long-term success. It's akin to a universal credit, such as a state pension. Some need it more than others, but if you remove the principle of all paying into it, then it becomes prohibitively expensive for those who do need it. So the question that MOOCs make both universities and students address is – how much do we value support? It's a profound question for the future direction of education.

MOOCs and Course Design

The third and final issue we will consider relates to course design. As mentioned in Chapter 1, being open creates a number of different opportunities for pedagogy. There are many different possibilities and motivations for being open, and as mentioned

earlier, open pedagogy would make a good book subject on its own. This section will focus on just one aspect, to again illustrate how the open nature of MOOCs raises different issues which then have a consequent impact on standard educational practice.

One of the oft-cited problems with MOOCs is their low completion rate. Some argue that to talk of completion rates in MOOCs is to miss their point. Downes (2014) has commented, ‘Nobody ever complained that newspapers have low completion rates.’ Learners take what they want from a MOOC in the same way that readers take what they want from a newspaper. Others state that MOOCs can’t really back up their revolutionary claims when only about 10% of learners complete a MOOC (Lewin 2013).

Jordan and Weller (2013a) have done some work plotting completion rates taking the various sources of publicly available data. The average completion rate (and there are different ways of defining completion) was 12.6%. A study by the University of Pennsylvania found lower completion rates of around 4% (Perna et al. 2013). **Figure 6** plots the attrition rates of active users, i.e., those that come into the course and do something such as watching a video, across disciplines:

The pattern in Figure 6 is very consistent across all disciplines. Given this fairly robust pattern of behaviour, there are two course design responses.

Design for Retention

The first response is to say that completion *is* a desired metric. There may be courses where it is desirable that as many people as possible complete. For example, a remedial maths course will require learners to complete a majority of the topics. The Bridge2Success project used a MOOC-like approach to aid

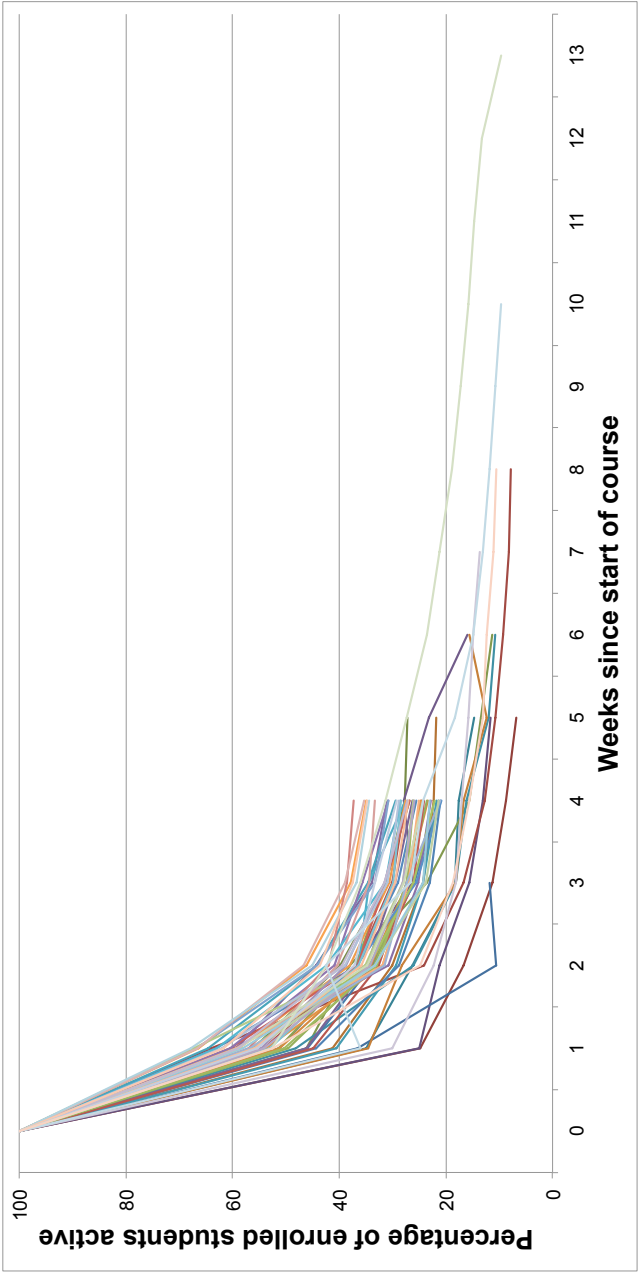


Figure 6: Attrition rates of active participants in MOOCs across disciplines.

Source: Jordan and Weller 2013a. Published under a CC-BY license.

learners with maths so they could gain a place on an employment program, so completion was very important (Pitt et al. 2013).

In this case the course design needs to address the ‘problem’ of drop-out rates. There might be a number of ways of attempting this: by adding in more feedback, using badges to motivate people, creating support structures, supplementing with face-to-face study groups, breaking longer courses into shorter ones, etc.

Design for Selection

The second design approach is to decide that completion *isn’t* an important metric. The course designer accepts the MOOC attrition rates in **Figure 7** and designs the experience with that in mind.

In this design approach the designer might break away from the linear course model, to allow people to engage in the ‘newspaper’ type selection that Downes refers to. A course might be structured around themes, for instance, and each one around largely independent activities. In this case course completion really doesn’t matter, since learners take what they want.

As a slight aside, it is likely that MOOC completion rates are being defined in such a way that gives them a low output compared with formal education, largely because the manner in which enrolment is defined is so broad. In formal education there are different ways of defining who has enrolled on a course, but it usually allows a cooling-off period. Students are not counted as being enrolled if they drop out in the first two weeks or fail to turn up at all. So, taking MOOC enrolment figures to be the number who signed up for a MOOC even if they never come into it is always going to give harsh figures. A better figure might be the number of students active after 1 week. This is the baseline figure as those are the students who have actually started the course.

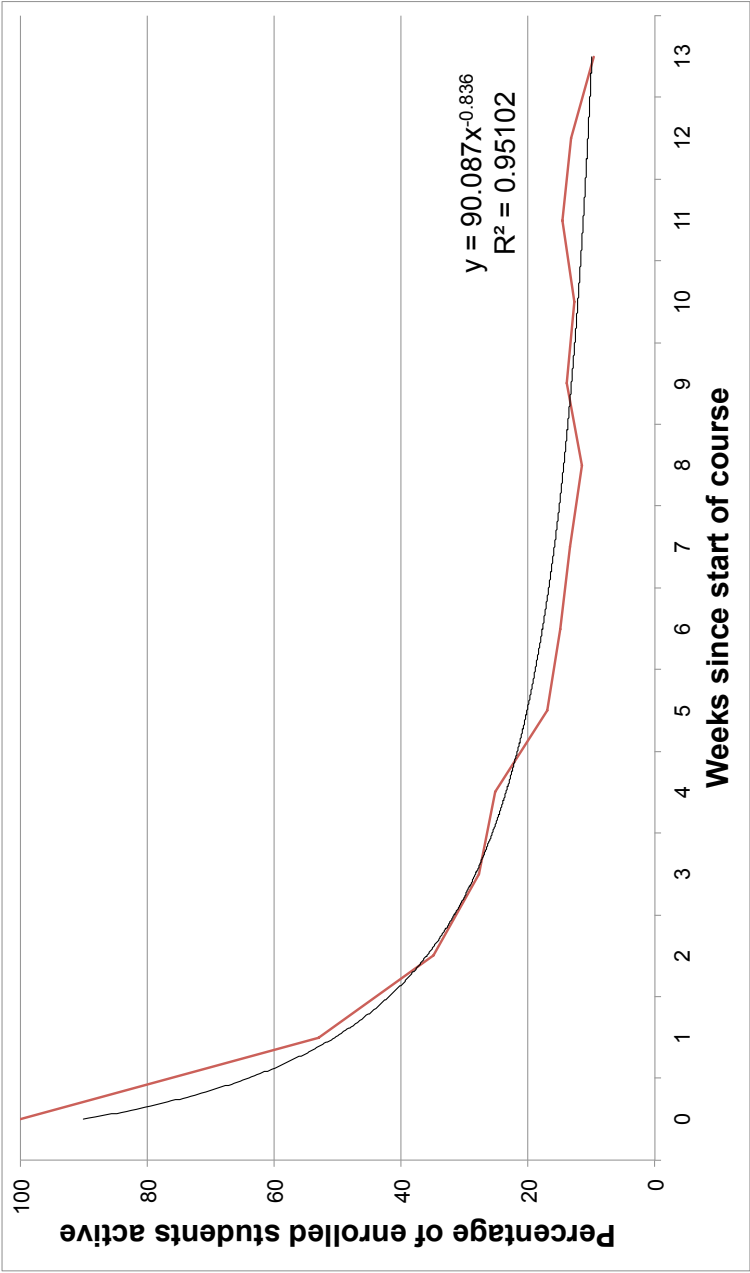


Figure 7: Average number of active learners over time.

Source: Jordan and Weller 2013b. Published under a CC-BY license.

Another graph Jordan and Weller (2013b) plotted showed the average number of students active across weeks (**Figure 7**), starting with the initial enrolment figures.

At the end of week 1, there are about 55% of students still active from the initial registration point. Many of those who registered will not even have come into the course once, so it is misleading to say they have dropped out. If this 55% figure is taken as the actual enrolment statistic as our starting figure, then the average completion rate rises to around 23%. With open entry learners on an unsupported course, this figure might not be as catastrophic as the numbers often quoted. There is a flip side to redefining completion rates in this way, in that it drastically reduces the impressive enrolment figures used to justify MOOC investments.

What this example and the preceding two demonstrate is that there are beneficial, or at least significant, issues raised for formal education by MOOCs. This is one of the strengths of openness – it causes us to examine assumptions in standard practice, which can be improved or altered. How educators design, cost and assess the quality of all courses, not just open ones, becomes altered by digital, networked applications, but it is the addition of the catalyst of openness that really accelerates the changes and possibilities. It is this positive impact of MOOCs that I want to focus on before examining their possible downsides. The next section will examine how MOOCs could relate to higher education and perform a complementary function.

MOOCs as Complement to Formal Education

Much of the hype around MOOCs has positioned them as being in competition to formal education. While this adversarial framing may make good sense in terms of a media narrative, as we

will see in the next chapter, it underplays both the actual impact of MOOCs and the adaptability of education. An alternative perspective is to view MOOCs as being similar to OERs, and complementary to formal education. Five such possible functions for MOOCs are set out below.

Open up a portion of courses – An online (or blended) course could be structured so that a portion of it functions as a stand-alone MOOC. This allows students to see if it's the type of course they want to study, to make connections and experience studying. This type of trialling has been found to be quite significant with OERs (e.g. Perryman, Law and Law 2013). It has several benefits for the institution and the learner. Firstly, it acts as a shop window, so it can increase student recruitment. Secondly, it can increase student retention, since those learners who will struggle can find this out for free and either take a different subject, study at a different level or take preparatory material. Thirdly it can widen participation, reaching audiences that the institution may have struggled to reach before. However, it should also be said that without support, the experience may be negative for some students and put them off from studying further.

Open boundary courses – As we have already encountered, some courses that have a campus based cohort can be made open to all. The digital storytelling course DS106 and the photography course Phonar are good examples of such courses. As well as the advantages set out above, this has particular benefits in certain subject areas. Photography is one such area where exposure to a wider audience, including professionals and experienced hobbyists, is beneficial. But for all students there is a benefit in developing a network of peers beyond their immediate cohort.

MOOC collaboration – Institutions could collaborate on MOOCs which are useful for a range of their students. The same logic that

underpinned learning objects comes into play here: Why teach the same subject at several places, when one high-quality MOOC can be created for all students to take that is recognised by all participating institutions?

MOOC recognition – By formally recognising certain MOOCs, it is possible that some institutions could shorten some of the courses they offer. For example, a learner could demonstrate that they have successfully completed a determined number of MOOCs, then they could enter an undergraduate degree in the second year and complete in two years. For the students it means fees are reduced by at least a third, which might make degree study more attractive. For campus universities they are selling the ‘campus experience’ more, without it being as prohibitively expensive. There would be reservations about developing some higher level, graduate skills with this approach, but it is feasible that a few institutions might adopt it to differentiate themselves.

Curriculum experimentation and expansion – Formal online courses are an increasingly large investment, which means course approval becomes more rigorous. The demands placed on a formal course are lessened for a MOOC (although they do not disappear), which allows for experimentation. And because MOOCs appeal to a global audience, what may not be a viable course for a campus, fee paying constituency may well be viable to a global community of informal learners. The result is that curriculum experimentation becomes less risky. It also means institutions can offer a broader curriculum, because they can offer their own curriculum but also recognise MOOCs from others. For example, ‘Hydro-engineering and Russian’ may be offered by a university that covers the engineering element, while Russian language is delivered via third-party MOOCs which are accredited and supported by the host university.

These possible scenarios illustrate how MOOCs could benefit formal education and operate alongside it in a sustainable model. However, much of the recent coverage of MOOCs has not focused on these possibilities, and instead has stressed the concept of MOOC as a replacement for university. This is partly a function of the commercial nature of many MOOC entrants, and it is this aspect that will be explored next.

The Commercialisation of MOOCs

Soon after Sebastian Thrun's MOOC caught the attention of the media, a number of commercial MOOC providers were established with venture capital funding. The most significant of these were Thrun's own Udacity and another Stanford based start-up, Coursera, led by Daphne Koller and Andrew Ng. After an initial investment of \$22 million, Coursera gained a further \$43 million in 2013 (Kolowich 2013a).

The business model of MOOC providers is not always clear. Coursera have stated that they have earned US\$1 million in revenue through selling certificates of completion, which cost between US\$30 and US\$100 (Heussner 2013). They also announced an employee matching service, Careers Service, whereby employers could pay a fee to be matched with the best performing MOOC students (Young 2012). These elements of headhunting and certification were combined by creating a paid-for 'Signature Track' model, whereby students pay a fee to have verifiable identity, records and certification (Coursera 2013a). In May 2013 Coursera also announced that they were partnering with 10 campus universities to offer campus based MOOCs (Coursera 2013b), where students on campus could take a MOOC with local support. This positioned them as an elearning

courseware provider, which Mike Caulfield (2013) had suggested was the intention all along.

In the meantime Sebastian Thrun announced that Udacity were close to finding the ‘magic formula’ for education (Carr 2013). Then in an interview in November 2013, driven by the completion rates outlined above, he announced that Udacity had a ‘lousy product’ and they were repositioning themselves to provide corporate training (Chafkin 2013). Such a pivot drew a considerable degree of comment and derision given the bold claims Thrun had made previously, with Siemens (2013) perhaps summing it up most succinctly: ‘Make no mistake – this is a failure of Udacity and Sebastian Thrun. This is not a failure of open education, learning at scale, online learning, or MOOCs. Thrun tied his fate too early to VC funding. As a result, Udacity is now driven by revenue pursuits, not innovation.’

It is Siemens’s last point that is worth pursuing in the context of MOOCs – the influence of venture capital funding. We should not be surprised that Coursera have attempted a range of business models, such an approach is not unusual with internet start-ups. It does suggest, however, that they are not entirely sure what the role of MOOCs is. Koller (2012) has promoted the democratisation of learning that MOOCs and Coursera offer as a social good, and their figures are impressive, with over 17 million enrolments by September 2013 (Coursera 2013c) – although this number should be treated with caution regarding what constitutes an enrolment, as mentioned previously. For comparison, there are only 2,300,000 students in higher education in the whole of the UK (HESA 2013). It might seem churlish therefore to criticise Coursera and other MOOC providers for providing access to free education. This section will not address issues such as pedagogy, which some have levelled as a criticism against MOOCs. While some of these

accusations may be valid, they often betray either a snobbishness regarding all online learning or an over-estimation of the variety and face to face contact that many students experience.

Instead the focus here will be on the open aspect of MOOCs. Although early findings (Kolowich 2013b) suggest that successful learners tend to be experienced learners with existing degrees, it may well be that given time and increased familiarity with MOOCs, Koller may be justified in her vision about the democratisation of learning. However, it is unlikely that such an altruistic goal is the intention of the venture capitalists who have invested \$85 million in Coursera. As MOOC companies have shifted their models to try and recoup these costs, they have moved further away from an open model: their contents are not openly licensed, so they cannot be reused by others; enrolment is often restricted to limited periods, so content cannot be accessed without enrolling; and many MOOC providers are limiting the universities they partner with to elite institutions. The Signature Track model of Coursera may be cheap compared with formal education, but it is not an open model, nor is the blended learning, campus based delivery. Udacity's transformation to a corporate elearning company demonstrates how quickly this shift from global provider of open education can occur if it is not founded in principles of openness. There has been a precedent for the Udacity move in FlatWorld Knowledge. FlatWorld was set up as an open access textbook publisher that allowed educators to modify the free online version and sold the physical product for a set price. In 2012 they announced that they were dropping free access to textbooks (Howard 2012), although they would remain an 'affordable solution'. The reason behind this was that their open business model simply wasn't generating sufficient revenue. Affordable textbooks are to be welcomed, but that is a very different entity

from an open textbook. As Siemens suggests, close alliance to revenue funding will come to dominate the concerns of start-ups, and openness is usually the first casualty when this happens. Given the costs of creating a MOOC, and the return that universities will start requiring for the investment of their staff, it is debatable whether MOOCs can be sustainable as a stand-alone business. As with OERs, they may be sustainable as an adjunct to existing university practice or for national agencies, charities and professional bodies who have an interest in engaging learners. Unless they are rooted in openness, however, it is unlikely that this will remain a central tenet of their identity. It may well be that MOOC providers transform themselves into low-cost education alternatives by offering a combination of quite sophisticated unsupported courses and automatic assessment. This would have a profound impact on access to education and higher education itself, but it would be a different proposition to their original 'open as in free' model, and it would have more in common with the open entry model of distance education personified by open universities. Whether elite universities would continue to subsidise a low-cost provider through provision of courses then becomes questionable, once the open aspect has been removed.

Conclusions

MOOCs didn't appear overnight from nowhere, although one might be forgiven for thinking so from the coverage they received. **Figure 8** from Yuan and Powell (2013) provides a clear indication of the contributing influences for MOOCs.

While some MOOC providers, such as the Harvard and MIT founded EdX, can be seen as part of a continuum with OERs, others have developed along commercial lines. To learners on

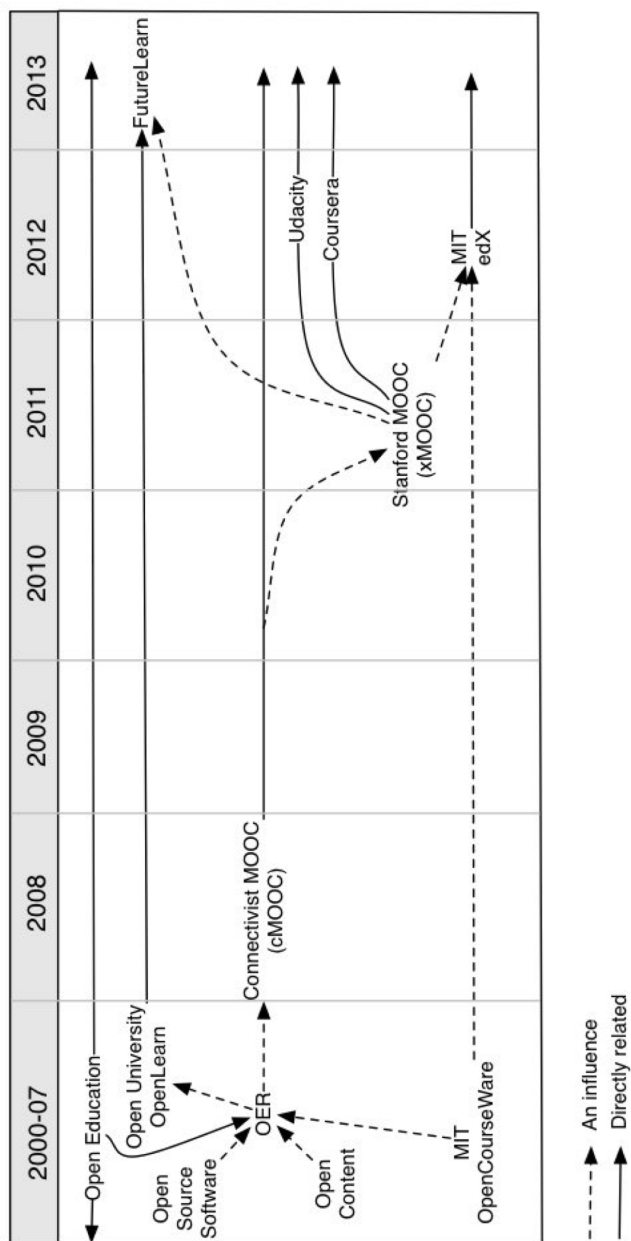


Figure 8: MOOCs and Open Education Timeline.

Source: Yuan & Powell 2013. Published under a CC-BY license.

MOOCs, these ideological differences may not have much of an impact – a Coursera MOOC does not feel radically distinct from an EdX one. As we have seen, though, they may have longer-term implications on the directions that MOOCs take.

The initial MOOCs were largely experimental, explicitly designed to take advantage of the possibilities that being open and networked offered. Openness was thus a key component in their design. As MOOCs became associated more with institutions, they acquired what we might term a ‘brand burden’. If MOOCs are to be seen as a global shop window, then their identity becomes closer to that of broadcast rather than network, with high-value production quality. Any failure of a MOOC can lead to considerable negative publicity for the institution, as the example of the Georgia Tech Coursera offering on Fundamentals of Online Education demonstrated (Kolowich 2013c). This course had problems with students using Google Docs to register and had to be suspended, mainly as a result of the scale of users. This shift from acceptable experimentation to part of the institution’s communications policy may have benefits in terms of sustainability, as MOOCs can be costed relative to the marketing benefit they gain, which is a model understood by universities. It may however have some negatives such as:

- MOOCs become prohibitively expensive – A good MOOC requires such high-end production that it is not economically viable given the low return.
- Only elite institutions offer MOOCs – Given the expense, only those institutions who have the money or the skills to produce broadcast-quality content will provide them.
- MOOCs become pedagogically conservative – Part of the problem with the Georgia Tech course was that

it was experimenting with a new approach, and if the cost of failure is too high then it becomes better not to attempt anything risky or innovative.

- Fear of MOOC failure becomes a barrier to adoption – Public failure can lead to damage for an individual's and an institution's reputation, so many will consider the risk too great.

In a relatively short space of time, MOOCs would have moved from being a means that allow educators to experiment with technology and pedagogy to another form of broadcast controlled by a few.

This loss of experimentation may also arise as a result of there being a few dominant MOOC providers. Instead of discovering new models of open education, running a MOOC on the Coursera (or EdX or FutureLearn) platform becomes seen as the way to run a MOOC. Diversity in the market is undesirable for commercial providers; they want to become the Microsoft or Google of MOOCs, since that leads to the best revenue. Indeed, becoming the dominant provider may be the only route to high revenue returns in the MOOC field. In the opening chapter I argued that the tensions in open education could be deemed a battle, because there was real value associated with being a victor. A loss of experimentation and market dominance for open courses would be an example of one such outcome.

This perceived loss of control over the platform for open courses has led to a 'Reclaim Open' initiative from MIT and UC Irvine. The Reclaim Open (2013) site bemoans that 'recent high-profile forays into online learning for higher education seem to replicate a traditional lecture-based, course-based model of campus instruction, instead of embracing the peer-to-peer connected nature of the web.' The site promises that 'Reclaim Open

Learning intervenes in this debate by supporting and showcasing innovation that brings together the best of truly open, online and networked learning in the wilds of the Internet.’ This can be viewed as a counter-movement to the growing dominance of certain models of MOOCs, which their technology platforms come to embody. The Reclaim Open initiative views engagement with various forms of technology as a route through which educators can take ownership of what it means to be open. Whether one supports Reclaim Open or not, their existence is an indication of the stage we are in for the battle for open, and suggests that ownership of the term is slipping, or has slipped, away. One does not see a ‘reclaim exams’ or ‘reclaim libraries’ movement.

If the analysis performed at the end of the last chapter for OERs against the open principles from Chapter 2 is repeated for MOOCs, this reveals some of the reasons for this underlying disquiet about MOOCs:

- Freedom to reuse – MOOC contents are not usually openly licensed, so they cannot be reused in different contexts (some providers have started to use CC licences now)
- Open access – MOOCs are open to all to sign up
- Free cost – this has been the main focus of MOOCs
- Easy use – the MOOC platforms have developed easy-to-use interfaces, although as noted above, the completion rates for this type of learning are low
- Digital, networked content – although MOOCs are obviously online and digital, they are often not fully networked, in that they can exist within a closed platform
- Social, community based approaches – some MOOCs are based around a very community-driven approach,

whereas others are more instructivist and individual paced

- Ethical arguments for openness – the democratisation of learning has been made as an ethical argument for MOOCs, but less on openness itself
- Openness as efficient model – apart from some cMOOCs, MOOCs are not usually developed in the open; instead they tend to be developed as proprietary products from within universities

This is not to discount the impact that companies such as Udacity and Coursera have had. They have raised the profile of elearning and open education considerably and innovated on technological fronts at a much more rapid pace than universities manage. The presence of commercial interests in the field can create a healthy mix of competition, innovation and different perspectives. For learners who are studying free courses the reservations universities and academics have regarding MOOCs may seem like an inevitable case of turkeys not voting for Christmas. However, it would be to the detriment of learners in the long term if one MOOC platform came to dominate or if, having undermined many higher education establishments, MOOCs then began to charge for courses.

Part of the reluctance (or resentment even) regarding MOOCs has been less focused on the actual concept or the providers, but rather as a reaction to the hyperbole and media flurry that has accompanied them. It is important to separate these two aspects out as the inevitable backlash sets in. This is in response to the exaggerated promise made for MOOCs rather than the more nuanced reality they may offer. Examining the nature of this narrative will reveal much regarding the battle for open, and this is the subject of the next chapter.