



WHAT TO DO ABOUT MOOCS? BEYOND THE FEAR OF MISSING OUT

Mark Brown, Eamon Costello, National Institute for Digital Learning, Dublin City University, Enda Donlon, Mater Dei Institute of Education, Mairéad Nic Giolla Mhichíl, Faculty of Humanities and Social Sciences, Dublin City University, Colette Kirwan, National Institute for Digital Learning, Dublin City University, Ireland

Introduction

This paper reports the experiences and insights from those leading discussions around the development of Massive Open Online Courses (MOOCs) at Dublin City University (DCU). In offering an insider's perspective the paper shares some of the drivers and deliberations that have taken place at DCU in developing a strategic response to the challenges and opportunities presented by the MOOC movement. A description of the key drivers, strategic deliberations and major decision points at DCU is provided along with a brief outline of several MOOC options. In reflecting on DCU's experience, the paper describes the value of a decision matrix and concludes with a number of guiding questions framing strategic decisions about the adoption of MOOCs.

Despite predictions the MOOC movement is a metaphorical *avalanche* (Barber, Donnelly & Rizvi, 2013) that will transform higher education, relatively few institutions are offering such courses. Allan and Seaman (2014) report from their survey of colleges in the United States (US) that the majority of institutions (53%) are still undecided about whether to develop MOOCs and one-third (33%) have no plans in this area. They also report the proportion of higher education institutions offering MOOCs is only around 8%, which is up from 5% the previous year (Allan & Seaman, 2014). Moreover, only 23% of academic leaders who responded to the survey believe that MOOCs represent a sustainable model for offering online courses. Arguably, what the above findings indicate is that many universities (at least in the US) are sitting on the sideline of the MOOC movement or may still be deliberating on an appropriate response.

The latter description reflects the case at Dublin City University (DCU), as although we have yet to commit to a particular MOOC platform there is a strong intention as a modern, digital-era University to be far more than a passive observer. To this end, the University is actively participating in two European funded MOOC projects (HOME & SCORE2020) and over the last 12 months has been identifying key internal drivers relevant to the most appropriate strategic response. In parallel to this work we have been evaluating a range of platforms that

offer the best strategic fit for any potential MOOC initiative. Drawing on this experience, the remainder of the paper shares an insider's perspective on recent MOOC discussions at DCU, including our drivers, platform options and guiding questions, which may be valuable to other institutions at a less mature stage in the deliberation process.

Background

DCU was founded in 1981 and comprises over 12,000 students. With the current Incorporation Project involving the merging of three independent Colleges of Education, and the creation of a new fifth Faculty of Education at DCU, the student body will increase by another 4000 students.

The institution has a reputation as Ireland's *University of Enterprise* through its strong, active links with academic, research and industry partners. Innovation is at the core of its institutional culture and DCU is an active member of the European Consortium of Innovative Universities (ECIU). Internationally DCU is ranked 366 in the 2014 QS rankings and has been ranked among the world's best in the QS league table of the world's young universities – QS World Top 50 under 50 University Rankings (ranked 44 in 2013).

DCU has offered distance education for over 30 years and previously hosted the National Distance Education Centre, which later became known as *Oscail*. The term *Oscail* translates to 'Open' in the Irish language and reflects DCU's commitment to extending access to higher education through more flexible models of learning. The University continues to play a leading role nationally in the provision of distance and online education, evidenced by the establishment of the National Institute for Digital Learning (NIDL) in November 2013. Notably, the NIDL hosted the first National MOOC Symposium in May 2015 and is currently supporting Ireland's first Horizon Report on future trends facing higher education.

The goal of widening access to higher education through the development of a 21st Century *Digital Campus* is a core feature of DCU's strategic plan. *Transforming Lives and Societies (2013 – 2017)* (DCU, 2012) provides a strategic framework for significant growth in the provision of online and blended learning across all faculties. Importantly, this growth is being led by a strong pedagogical focus as DCU endeavours to offer a more interactive, collaborative, media rich and personalised learning experience.

Strategic Drivers

Why would any higher education institution contemplate launching a MOOC initiative? Allen and Seaman (2014) report the two most cited reasons for introducing MOOCs are marketing-related: (i) to "increase the visibility of the institution" and (ii) to "drive student recruitment". Interestingly, universities with the most extensive traditional online offerings were also those most likely to say that they are embracing MOOCs to "increase the visibility of the institution". In contrast, Colleges with no current online offerings report MOOCs will be used to "drive student recruitment" (Allen & Seaman, 2014). Over one-third of institutions with current or planned MOOCs cited reasons related to course design issues, including a desire to

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“experiment with innovative pedagogy” or “provide more flexible learning opportunities”. Relatively speaking Allen and Seaman (2014) found there was less support for other goals, such as “reaching new students”, “supplementing on-campus” activities, potential “cost reductions”, “learning about scaling”, and “generating income”.

Holland and Tirthali (2014) report a similar trend from interviews with 83 educational leaders across a range of predominantly US-based institutions. Notably, 65% of institutional leaders report that “extending reach and access” was a key reason for offering MOOCs, followed by 41% acknowledging the value of “building and maintaining their brand”. In addition, they found that “promoting innovation” (38%) and “improving educational outcomes” (38%) were important factors influencing decisions to develop MOOCs (Holland & Tirthali, 2014). In contrast to Allen and Seaman (2014), the goal of “improving economics” (38%) (i.e., potential cost savings and/or generating revenue) was identified as an important longer-term goal. Also Holland and Tirthali (2014) report the goal of “supporting research on teaching and learning” (28%) was a consideration, with a particular emphasis on improving participant engagement and completion rates. Importantly, there appeared to be ‘less effort on determining whether learners actually gain new skills and knowledge from the courses’ (Holland & Tirthali, 2014, p.11).

Conor (2014) provides a more detailed analysis of the institutional policy drivers and change dynamics based on the experience of introducing MOOCs in three Australian universities. Through interviews with senior academics and analysis of policy documents, four commonalities were identified from the institutional constructions of MOOCs: (i) the use of e-learning policy was seen as a vehicle for curriculum redesign; (ii) an emphasis on internal curriculum redesign and transformation of the student learning experience was a core rationale for MOOCs; (iii) there was a desire to capitalise on promotional opportunities but at the same time a reticence around wholly embracing the phenomenon; and (iv) the absence of access-driven concerns in university policy despite the prominence of the goal of widening participation in broader public debate about the potential of MOOCs (Conor, 2014). This disconnection from the ‘extending access mission’ that strikes at the core of the new openness movement is explained in that:

“e-learning policies are being used as instruments to drive broader changes in curriculum and curriculum design practices at these institutions, that curriculum leaders see concurrent opportunities for curriculum renewal and institutional promotion in relation to MOOCs, but that they have concerns about what MOOCs represent for the university, and are reluctant to embrace narratives that promote changes to access and traditional enrolment practices” (Conor, 2014, p.633).

Developing an Institutional Response

In the case of DCU, all of the above goals and drivers have been discussed over the last 12 months, including the key tension between promoting wider access to higher education to increasingly diverse and geographically dispersed people who might not normally be able to study, whilst protecting the University's international reputation. In unpacking this tension and analysing the pros and cons of whether or not to develop MOOCs, we believe there is little doubt that an initiative in this area has potential to enhance DCU's reputation as one of Ireland's leading online/distance education providers. Moreover, a well-developed MOOC programme might help to position DCU as a global player in this burgeoning area. After all, as shown by Allan and Seaman (2014), very few US universities have launched MOOC initiatives and proportionally the number is probably even less in Europe. Set against the new global higher education landscape, joining a MOOC platform offers the opportunity for DCU to promote our existing online programmes to a wider audience, which may, in turn, help to recruit prospective international students (either on-campus or off-campus) to degree programmes in key areas of world-class research expertise.

The crucial point is that the goal of recruiting new students and enhancing DCU's international reputation for quality are not mutually exclusive from our tradition of promoting wider access to higher education. All of these drivers are firmly rooted within and articulated throughout DCU's institutional mission of *Transforming Lives and Societies*.

In this regard any decision to develop MOOCs will be part of a larger strategic development linked to the establishment of a new *DCU Connected* (<http://connected.dcu.ie>) brand, which was formally launched in August 2014. With a strapline of 'A quality education wherever you are', the development of a suite of online short courses to extend the University's outreach and reputation alongside our stable of existing online degree programmes, under the umbrella of *DCU Connected*, is seen as a logical extension of this initiative.

Importantly, the term *Connected* was deliberately chosen to shift the focus to the learner experience rather than a particular delivery methodology. We believed the adoption of something like *DCU Online* would be inherently institutionally centric and increasingly passé in today's digital world where online learning is becoming the new normal. Also true to our mission, *DCU Connected* has a philosophy of working with strategic partners to develop customised, locally relevant and digitally enhanced courses and programmes for a diverse range of students, irrespective of geographical location. For this reason, *DCU Connected* incorporates a number of the University's significant transnational activities, including a strategic relationship with Princess Nora Bint Abdul Rahman University in Saudi Arabia, where DCU is contributing to local capability development in a university for women. Another noteworthy partnership is with Arizona State University (ASU), the largest public university in the US, where DCU is jointly developing a number of online courses, including a Masters in Biomedical Diagnostics.

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In addition to the above high-level strategic drivers, the decision to pursue a MOOC agenda is being significantly influenced by DCU's commitment to creating a modern *Digital Campus* which enables a culture of innovation and the goal of providing students with a 21st Century learning experience (DCU, 2012). More specifically, the MOOC is viewed as part of a wider ecology of innovation (Weller & Anderson, 2013) that may help with the step change DCU is aiming to achieve through curriculum redesign and increasing capability in new digital pedagogies. In terms of the wider innovation agenda, supported by the NIDL, it needs to be noted that in weighing up different MOOC options considerable value is placed on the chance of collaborating in a consortium of institutions in order to learn as much as possible from the experience. Hence there is also a research dimension to our interest in MOOCs, which is one of the reasons why we have chosen to play a role in the European funded OpenUpEd initiative.

Lastly, another benefit of developing a suite of MOOCs is the potential they offer in terms of transition education and more particularly first-year retention and learner success (Vihavainen et al., 2013). This goal is not something explicitly identified in the aforementioned research on the drivers influencing decisions at other institutions. The focus is a little different as we believe brief online taster courses, which showcase different subjects, may help prospective students to select the right degree programme by gaining a better sense of the discipline and what is required to be successful (Carson et al., 2012). Moreover, a free online taster course may help prospective students to better understand the career opportunities from pursuing study in the discipline. Such knowledge is an important factor in shaping programme choice and ultimately student success. In a similar vein, MOOCs are perceived to have potential value in promoting student readiness, especially in terms of understanding how to be an effective online learner.

In summary, *DCU Connected* provides an overarching strategic platform that encapsulates the mission of extending access to higher education and transforming lives and societies by harnessing the technical and pedagogical affordances of new digital technologies. It follows that the potential of MOOCs in promoting openness, life-long learning and increased participation in higher education aligns with DCU's mission. Another primary driver for DCU's interest in MOOCs is around fostering innovation, curriculum renewal and professional development in the areas of online and blended learning in accordance with the stated goals of our Strategic Plan. Following on from this point, through a research and development programme supported by the NIDL, the University is keen to transfer pedagogical lessons from the use of MOOCs to enhancing the student experience. Finally, MOOCs are also seen to offer potential for DCU to support readiness for university study and successful transitions, particularly for at risk learners.

Reviewing the Options

Over the last 12 months the NIDL has been investigating the technical, pedagogical and strategic affordances of a number of MOOC platforms, which are briefly outlined below.

Alison

ALISON, which stands for Advance Learning Interactive Systems Online, is an Irish based initiative that claims to be the world's first and original MOOC platform (<http://alison.com>). Founded in 2007, ALISON reports that over 3 million learners have participated in one of their courses, which are offered on behalf of, and in partnership with, a number of major companies, including Google, Microsoft and MacMillan.

Open2Study

Over the course of 2014 several discussions took place with Open Universities Australia (OUA) about joining the Open2Study (<https://www.open2study.com>) platform. Two options were explored: (i) joining the existing group of mainly Australasian institutions using the platform; or (ii) negotiating a license to purchase a clean skin version of Open2Study to launch a new Irish/European branded MOOC.

FutureLearn

FutureLearn (<https://www.futurelearn.com>) was established in December 2012 as a private company wholly owned by The Open University in the United Kingdom (UK). The number of partner institutions has steadily grown and FutureLearn claims to now support over 20 of the best UK and international universities. That said, the majority of member institutions still come from the UK, with many part of the so-called 'Russell Group', and so far FutureLearn has yet to establish a strong US foothold.

OER universitas

The OER universitas (<http://oeru.org>) is a global network of more than 30 universities, colleges and polytechnics collaborating to develop free online courses to provide a unique pathway to formal academic qualifications. The initiative has attracted donor funding from The William and Flora Hewlett Foundation and is supported by UNESCO and the Commonwealth of Learning. The OERu is founded on the principles of outreach and community service and has a mission of using solely Open Educational Resources (OER) to provide free learning pathways to people without access to traditional university entry.

Udemy

Udemy (<https://www.udemy.com>) is a commercial platform that claims to contain over 18,000 courses. This high number is partly explained by a model which provides very little barrier to entry to providers allowing individual teachers to easily sign up and create their own courses. Course creation is free and Udemy's business model is based around a split share of fees with courses ranging in price from free or a few (US) dollars to several hundred.

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Notably, UdeMy also offers a clean skin version of the platform, which is primarily based on Moodle.

Iversity

Iversity (<https://iversity.org>) claims to work in close cooperation with teachers, universities and knowledge-based companies to build high-quality free online courses. The stated aim is not to replace the university but to empower individual academics to offer courses in their specialist subjects. In this respect the model is not dissimilar to UdeMy where the focus is on providing a portal for courses rather than a MOOC platform for enterprise-wide institutional initiatives. Having said that, because Iversity is based in Europe, it can potentially take advantage of the European Credit Transfer System (ECTS).

Tata Corporation

In November 2014, a high-level delegation from the Tata Group (<http://www.tata.com>) visited Ireland to discuss the idea of offering their purpose built MOOC platform to help make the Country the world's leading provider of online learning. The Tata Group, founded in 1868, is a global enterprise headquartered in India, and comprises over 100 operating companies, with operations in more than 100 countries across six continents. The delegation attracted considerable media interest and met with senior politicians, government officials and university leaders, including the President of DCU. These discussions are now continuing with DCU and the NIDL although at this stage we have yet to define the business model.

Open Source Options

Several open source options for course online course delivery are already available, including Moodle and OpenEdX. A standard or customisable version of Moodle could be deployed with the advantage that DCU already has considerable experience is using this platform. On the other hand, EdX has the advantage of being a purpose designed MOOC platform that supports local customisations. Moreover, EdX is currently being used for MOOC delivery by a number of well-known universities and there is a growing community of users. Also an external hosting option is available for OpenEdX through Edcast (<http://www.edcast.com>), which DCU is currently piloting.

OpenUpEd

DCU is already a 'partner in planning' for the European funded OpenUpEd initiative (<http://www.openuped.eu>). OpenUpEd reflects a particular philosophy of *openness* and offers a portal for aggregating MOOCs rather than a technical platform. In contrast to other MOOC initiatives, OpenUpEd values and promotes diversity of design and delivery by supporting courses in different languages and through a variety of platforms. In other words, the distinguishing feature of this initiative is that each partner institution uses its own digital platform rather than a common or purpose built MOOC. Although OpenUpEd currently claims to have around 170 courses in 12 different languages, the lack of common software architecture and supporting infrastructure makes this option somewhat problematic. At this

stage, however, DCU remains committed to OpenUpEd, as the overarching philosophy is consistent with our mission of transforming lives and societies.

Finding the Right Fit

All of the above MOOC options have advantages and disadvantages and the only way that DCU has been able to fully evaluate their strategic fit for purpose is to review the functionality, sustainability, business model, strategic affordances, and so on, of each platform using a decision matrix.

To guide this decision process we have developed a set of key questions that institutional leaders responsible for weighing up the pros and cons of different MOOC initiatives need to consider. The following questions are not intended to be inclusive of all the situated and contextual factors relevant to other institutions as they primarily reflect the strategic drivers identified from the DCU experience.

- How technically fit for purpose is the platform?
- How pedagogically fit for purpose is the platform?
- How sustainable is the business model for the platform?
- How reputable are the partners associated with the platform?
- How well is the platform suited to supporting academic readiness?
- How well does the platform support innovative forms of pedagogy?
- How strong is the pedagogical community supporting innovation through the platform?
- How well suited is the initiative to promoting the goals of outreach and wider access to higher education for all?
- What will be lost if we do nothing? What are the opportunity costs associated with the initiative?
- What are our measures of success? How will we know whether the MOOC platform has met our success criteria?

A decision matrix with different weights assigned to the above questions according to significance has helped to provide a more thorough and trustworthy evaluation of the relative merits of each MOOC option. This approach assigns a score to each question from low to high, multiplied by the respective weight, to help calculate an overall total for each MOOC platform. While there are other qualitative factors that need to be considered in reaching a decision on the most appropriate MOOC option for DCU, this type of decision matrix serves as a valuable tool for evaluating such a rapidly evolving area of innovation.

Conclusion

This paper has given a brief account of the MOOC debate. Against the backdrop of this debate the key drivers, deliberations and decision points that have faced DCU in evaluating different MOOC options have been described from an insider's perspective within a single institutional context. What is clear from this micro level experience is that a rationale for investing in MOOCs based on the 'Fear Of Missing Out' (FOMO) does not provide a strong or sustainable argument for committing valuable resources to this area innovation. Any strategic decision to invest in MOOCs needs to be weighed up against the opportunity costs of pursuing other innovations, as teachers and academic leaders may be distracted from more important work. Where DCU goes from here has yet to be determined but there is a strong desire to learn from, and contribute to, the evolution of the MOOC movement. Put simply, DCU intends to continue to play a leading role in new models of online, blended and flexible learning. However, the challenge of weighing up and prioritising competing institutional drivers, along with the complexity of choices facing universities in the age of the MOOC, should not be underestimated. There are significant financial and reputation risks. With this last point in mind, the particular contribution of this paper is that it offers insights into a number of strategic questions about MOOCs, which we hope may help guide future decisions in other institutions.

References

1. Allen, I.E.; Seaman, J. (2014). *Grade change: Tracking online education in the United States*. Babson Survey Research Group and Quahog Research Group, LLC.
<http://www.onlinelearningsurvey.com/reports/gradechange.pdf>
2. Barber, M.; Donnelly, K.; Rizvi, S. (2013). *An avalanche is coming: Higher education and the revolution ahead*. Institute for Public Policy Research. London
3. Carson, S.; Kanchanaraksa S.; Gooding, I.; Mulder, F.; Schuwer, R. (2012). Impact of OpenCourseWare publications on higher education participation and student recruitment. In *The International Review of Research in Open and Distance Learning*, 13(4), (pp. 19-32).
4. Conor, K. (2014). MOOCs, institutional policy and change dynamics in higher education. In *Higher Education*, 68, (pp. 623-635).
5. Dublin City University (2012). *Transforming Lives and Societies in Dublin City University Ireland's University of Enterprise Strategic Plan 2012 – 2017*. Dublin.
http://www.dcu.ie/images/carousel/DCU_Strategic_Document.pdf
6. Holland, F.; Tirthali, D. (2014). *MOOCs: Expectations and reality. Full report*. Center for Benefit-Cost Studies of Education. Teachers College, Columbia University.
http://cbcse.org/wordpress/wp-content/uploads/2014/05/MOOCs_Expectations_and_Reality.pdf

7. Vihavainen, A.; Luukkainen, M.; Kurhila, J. (2013). MOOC as semester long entrance exam. In the *Proceedings of the 14th Annual ACM SIGITE Conference on Information Technology Education*, (pp. 177–182). SIGITE '13, ACM.
8. Weller, M.; Anderson, T. (2013). Digital resilience in higher education. In *European Journal of Open, Distance and e-Learning*, 16(1), (pp. 53-66).
http://www.eurodl.org/materials/contrib/2013/Weller_Anderson.pdf