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MOOCS: THE ‘UNINTENDED’ LESSONS

What is the impact on practice in learning and teaching for academic practitioners and other professionals who have been involved with Massive Open Online Courses?

On a global basis by the end of 2018, Massive Open Online Courses (MOOCs) had registered some 101 million learners on 11400 courses, produced by more than 900 universities (Shah, 2018). In 2018, 20 million new learners signed up for at least one MOOC, down from 23 million the year before (ibid.). Despite the slowdown, the number of paying users may have increased. This extraordinary phenomenon – some 12 years since the first development of MOOCs – has seen an online learning experiment evolve to a mass learning opportunity.

What marks a MOOC out from ‘conventional’ online learning is that limited professional academic time (sometimes virtually none) is allocated to guiding or supporting individual learners. Critics argue that MOOCs can be inferior to the university courses they mimic because they eliminate this support in terms of teacher-student interactions and involve limited student-student interactions (ExtensionEngine, n.d.). This is probably the biggest difference between other forms of online learning and MOOCs. However, the intense interest in MOOCs stems from relatively recent trends in online learning to enhance design features that support the self-regulated learner (Hatzipanagos, 2015) – self-regulated learning being the ‘holy grail’ of online education.

In addition to self-regulation, foci of debates on MOOCs have included:

1. understanding student motivation for enrolling in MOOCs: a significant factor that frequently stems from the desire of educational providers to benefit from any motivation the students had
2. the reasons for student non-completion: attrition rates are particularly high in MOOCs and significantly higher than rates in the distance learning sector
3. instructors’ reasons for offering MOOCs: pedagogical and learning design motivations are an intense focus of discussion
4. the challenges involved for institutions and staff: frequently this refers to the logistics of

support; setting assessment, and providing feedback to big numbers of students

5. student behaviour in MOOC communication hubs, for instance discussion fora
6. the challenges of peer assessment: still contested by many in the educational community, peer assessment often comes across as a key element of the MOOC model
7. predicting student performance or dropout using statistical methods and learning analytics: the MOOC expansion took place in parallel with a renewed interest of using online environment data to analyse and predict student behaviour (Khe *et al*, 2018)

Critical debates have also included sharp criticism. Zavacki *et al* (2018) summarised the main points of criticism discussed in the academic community around the perceived disadvantages of MOOCs. These, beyond high dropout rates, comprised discussions about questionable course quality; unavailable course credits and accreditation of prior experiential learning taken elsewhere; ineffective assessments; complex copyright issues; difficulty in evaluating students’ work; a sense of speaking into a vacuum due to the absence of immediate feedback from students; heavy demands of time and money, and a lack of student participation in interactive functions.

Rationale for our research

While the institutional motivation to engage with MOOCs is, in many cases, unclear, our understanding is that it included the explicit and progressive intention to offer lifelong learning opportunities at no or low cost; to boost the institutional profile; to recruit students onto formal programmes; to make money, and to keep up with the field in a major area of innovation. From a pedagogical point of view, our previous research outcomes indicated that MOOCs offer the potential for innovative instructional designs to support self-regulated learning, unlike approaches



in more 'traditional' Virtual Learning Environment-based online courses (Hatzipanagos & Tait, 2014).

However, this time, in our research we proposed to explore a theme which is as yet, as far as we know, broadly unexamined – namely the 'unintended' impact on campus-based teaching for those who had been involved in MOOC production and presentation. Our hypothesis was that involvement in online teaching through MOOCs would, for many academics, provide their first opportunity in online teaching, and that the modalities of multimedia and other MOOC learning design features might result in changes in attitude towards online pedagogies and learner support.

Methodology

To this end, with the support of the Centre for Distance Education, we interviewed nine academics from five universities and organisations who were involved either in the production or delivery of MOOCs (as MOOC directors of production, academic leads or in learner support) through the University of London supported partnership with Coursera. Our semi-structured interviews were based around the following core lines of enquiry:

Has your involvement with MOOCs had any impact on:

1. Your mainstream teaching? If so, in what ways?
2. Your professional priorities in teaching and research?

We transcribed and coded the collected data to identify dominant themes within these two broad categories.

Findings

The impact of MOOCs can be direct when MOOCs are embedded in the curriculum, either as foundation courses or as learning materials that engage learners in formal study. However, this impact can also be indirect and unintended, e.g. when learning design features of MOOCs challenge and enrich 'traditional' and more established teaching practices. In blended learning, the influence is on campus practices, e.g. introducing MOOC attributes into campus classes and associated online activities.

Impact on mainstream teaching

MOOCs seemed to influence the attitudes of the participants in this study towards 'on campus' teaching and their approaches to blended and online teaching. All the participants in this study believed that their engagement with MOOCs had an impact on their practice. A dominant attitude was that involvement, in part, changed classroom teaching and helped them to embrace new developments in faculty. Responses referred to the acquisition of digital skills; embracing innovations; reviewing key pedagogical practices in learning design on campus (including the use of multimedia); adopting automated assessment, and assessment



by peers. Five participants referred directly to embedding MOOCs into more 'traditional' online learning approaches leading to a transformation of the curriculum e.g. encouraging learners to engage with flipped classroom activities. The following statements from participants illustrate these attitudes:

'MOOCs made me reflect on the role of the teacher... made me think about being personally the conduit of information.'

'[I] combined [MOOCs] with flipped classroom to change on-campus practice.'

'[MOOCs] demystified online learning.'

'[MOOCs] introduced multimedia into campus classes.'

'[MOOCs] have begun to normalise online learning.'

All participants referred to embracing the use of multimedia (particularly video – being the dominant multimedia technology in MOOCs). Adopting assessment techniques and reinstating automated assessment as a 'valid' assessment format was commented on by six of the participants. Changing attitudes towards the use and acceptance of peer learning as an alternative assessment format and reinstating it as a summative, as well as formative, tool for evaluating learner progression and achievement was a key theme in comments by four of the participants. However, not all participants were positive about the adoption of peer learning on campus. As someone commented:

'[I] experimented with peer feedback on campus...not a very big success. On campus students are a bit 'jumpy' having peers giving grades...good for work in progress feedback and formative assessment...but final mark is given by me not a peer.'





Evidence suggests that MOOC involvement has challenged and enriched traditional teaching practice, in both established distance education programmes and on campus teaching activities

Impact on professional priorities in teaching and research

In this part of our research we looked for evidence that MOOCs overall played a role in influencing professional priorities for the participants of this study. In this respect it seems that a significant related factor was embracing change as career progression, and how this could impact on professionals' career advancement. Four participants referred to direct professional gain from their involvement with MOOCs.

Other comments on professional priorities referred to the adoption of teaching resources and engaging with a broader target population of learners:

'Made me aware of a wide range of resources for students.'

'I have developed capacity to engage with a wider range of students, e.g. refugees.'

In two cases it was volunteered that the focus on pedagogy in MOOC development had led to publications, and to exploring a new research area in addition to the core subject based focus:

'[I] have published for first time on learning and teaching.'

Participants also referred to the impact that their involvement had on their colleagues' attitudes towards MOOCs and their attitudes to evaluation, including the evaluation of their own practice. It seems that involvement with MOOCs was a catalytic factor there. The ones who were involved were happy to transfer some of the successful engagement with MOOCs to mainstream campus-based and blended learning practices. It must be said that according to our data, this was not always done successfully and there were cases where they did not achieve what they expected. An example of a limiting factor was given as the lack of digital skills and integrating MOOC content without sufficient knowledge of how good practice in MOOCs could be transferred to mainstream teaching. However, a motivating factor was the reduction of teaching workloads that could result from accumulated experience in MOOCs involvement. As an interviewee commented:

'We are getting better at this. We have a good grip now about managing the impact on people's workload.'

Conclusion

While our investigation was small scale it suggests involvement with MOOCs has indeed had indirect and unintended outcomes on mainstream teaching practice. There is evidence to suggest that MOOC involvement has challenged and enriched traditional teaching practices for the participants of this study in both established distance education programmes and on campus teaching activities. It has achieved this by:

- Supporting engagement with a wider range of learners
- Stimulating reflection on learning, teaching and assessment practice
- Reviewing professional priorities in learning and teaching

In addition to the range of motivations for institutional commitment to MOOCs, it may be added that MOOCs seem to play a change agent role by accelerating innovation with digital practices in both distance and campus based programmes.

The article is a summary of research undertaken in 2017 and 2018 for the Centre for Distance Education of the University of London.

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