Get Interactive: The Value of a MOOC for Continuing Professional Learning and Development

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Abstract

Get Interactive: Practical Teaching with Technology is a Massive Open Online Course (MOOC), which launched in 2017. The course, for anyone who teaches online in Higher Education, has actively engaged over 17,500 participants worldwide. This chapter explores the multifaceted value that MOOCs such as Get Interactive offer participants and institutions as a form of Continuing Professional Learning and Development. In contrast to dominant forms of MOOCs as scaled-up online versions of undergraduate courses featuring talking-head videos with limited participant engagement, Get Interactive was designed to model and promote social and collaborative learning with technology. Supported by the Bloomsbury Learning Exchange (BLE), the MOOC aimed to create a cross-institutional community of practice of online teachers in Higher Education. Drawing on Laurillard's (2012) approach to teaching as a design science and Wenger, Trayner & De Laat's (2011) value creation framework for assessing professional learning in networks and communities, the chapter considers the extent to which we can evidence immediate, potential, applied, realized and reframing value for MOOC participants. Data from participant reviews and engagement with collaborative activities are examined in relation to these five values. Finally, the chapter reflects on the value for institutions of low-cost, high-impact MOOCs like Get Interactive.

Introduction

The approach to Continuing Professional Learning and Development (CPLD) taken here draws on previous work exploring the value of Massive Open Online Courses (MOOCs) for scaling up collaborative online professional development (Laurillard & Kennedy, 2020), particularly for teachers in Higher Education (Kennedy & Laurillard, 2019; Laurillard, 2016). MOOCs have been dogged by controversy over their apparent high drop-out or low completion rates. Compared to typical undergraduate courses, without the motivation of a high stakes, tutor-marked, summative assessment, a relatively small proportion of MOOC participants complete all assignments for their courses (Hollands & Tirthali, 2014). However, there is a growing body of scholarship that argues that comparisons to undergraduate courses are inappropriate (Kizilcec & Piech, 2013; Kizilcec & Schneider, 2015; Walji, Deacon, Small, & Czerniewicz, 2016), since MOOC participants have different motivations for study and other measures are better suited to assessing their success. For professionals, who have achieved a high level of education and are experienced, self-regulating learners, MOOCs offer the potential to learn both from the course designers, and from each other, in courses that support peer dialogue and knowledge building (Scardamalia & Bereiter, 1991). The chapter discusses the design and evaluation of "Get Interactive: Practical Teaching with Technology" a co-designed CPLD MOOC for teachers that has been available "on demand" on the Coursera platform since 2017

(henceforth "GetInMOOC"). Drawing on a range of evidence, we will show that engagement with GetInMOOC creates multiple cycles of value for participants, that can include, but are not dependent on, completing all assignments. Crucially, we show that this value extends to the application to practice, and the realisation of value for others, including participants' students, colleagues and institutions.

Continuing professional learning development of teachers as designers

The approach to CPLD taken here draws on Laurillard's (2008, 2012) conceptualisation teaching as a design science conducted by teacher-designers, encouraging teachers to design and share effective educational uses of technology. GetInMOOC aimed to create an online learning community to support HE teachers to create dynamic, interactive online courses and to share their own knowledge, skills and understanding with each other. Specifically the learning objectives of GetInMOOC were to support teachers to use multimedia tools (week 1), create student collaboration opportunities (week 2), and provide formative assessment and feedback through technology (week 3).

A MOOC was an ideal vehicle for this, since MOOCs based on CPLD principles have the potential to offer effective, quality learning for teachers (Falkner, Vivian, Falkner, & Williams, 2017) by creating flexible, collaborative, social learning opportunities (Smith, West-Puckett, Cantrill, & Zamora, 2016). The kind of opportunities they provide are for "just in time learning", defined as "anywhere, anytime learning that is just enough, just for me, and just in time" (Brandenburg & Ellinger, 2003, p. 309). Moreover, MOOCs can provide economies of scale that can have enormous benefits to governments facing increasing demands for retraining and professional development of the workforce (Marrinan, Firth, Hipgrave, & Jimenez-Soto, 2015). If we are able to design quality, cost-efficient, MOOCs that have evidenced impact on participants' CPLD, then we have a sustainable approach to upskilling the global teaching workforce, with benefits for teachers and learners everywhere.

Nevertheless, to make any informed judgement about the effectiveness of MOOCs for CPLD, what is required is an examination of value created for participants over a sustained period. We therefore adopt an evaluation approach adapted from Wenger, Trayner, and De Laat (2011) to demonstrate the impact for participants of engaging in high quality MOOCs both during, and critically, after completing the course.

To Bloomsbury and Beyond! The origins of GetInMOOC

The origins of GetInMOOC lie in 2014 with the Bloomsbury Online Course ('BLOOC') – a pioneering cross-institutional course driven by the Bloomsbury Learning Exchange (BLE) to provide value to its partner institutions through collaboration. The BLOOC was led by Eileen Kennedy at the Institute of Education (now part of University College London) and co-designed with learning technologists and champions at the BLE consortium, at the time comprising Birkbeck, Institute of Education, London School of Hygiene and Tropical Medicine, Royal Veterinary College, and the School of African and Oriental Studies. The aim of the BLOOC was to co-create an online course open to all staff at these five institutions that would model good practice in teaching and learning with technology, showcase excellent work at each institution, and develop a community of practice across the broad spectrum of academic

disciplines represented by the five institutions. The course was designed to leverage interest in online learning generated by the MOOC phenomenon, but also to create a model that more precisely fitted the needs of the target group with the specific aims identified below. The first run of the BLOOC achieved 230 enrolments, managing to engage far more staff than could attend face-to-face workshops, and feedback was wholly positive. In subsequent runs, there were requests from staff not based at the BLE consortium to participate, and in 2016 we proposed a scaled-up version of the BLOOC on the Coursera platform, and were awarded £13,000 from University of London to create the course in six months.

GetInMOOC Design

Our challenge was to design a MOOC with few resources and limited time. We were also aware that the HE teachers we targeted had little time for teacher CPLD (Philipsen, Tondeur, Roblin, Vanslambrouck, & Zhu, 2019). Our response was therefore to make each unit of the course worthwhile, providing practical takeaways that combined pedagogy with technological skills. The pedagogical foundation for the course was Laurillard's (2012) Conversational Framework. Laurillard (2012) synthesised pedagogical insights from learning theory (including Dewey, Vygotsky, Piaget, Pappert, Bandura, Lave and Wenger and many others) into a model of the conditions necessary for teaching and learning to take place. This framework proposes that the teacher should engage learners in three cycles of communication – the Teacher Communication Cycle (where teachers communicate and monitor learning concepts); Teacher Practice and Communication Cycles (where teachers model learning and set up environments for learners to practice concepts) and the Peer Communication Cycles (where students can communicate concepts and support learning for each other). To put these in place, the teacher is required to design opportunities for the learner to engage with six types of learning: acquisition, investigation, discussion, practice, production and collaboration. Critically, only the first of these involves the teacher presenting information to the student, thereby shifting the emphasis away from lecturing to facilitating students' learning, and providing an education-driven approach to using technology to support the six learning types. An online tool (http://learningdesigner.org) provides teachers with practical help to instantiate the Conversational Framework in their teaching.

GetInMOOC modelled the Conversational Framework by engaging participants in the three cycles of communication, and providing learning experiences based on the six learning types. Since patterns of engagement in MOOCs typically drop off week by week, the first week included the key design principles essential for participants to meet the course objective of creating dynamic, interactive online courses. The Conversational Framework was introduced at the very start, and a Learning Design (created in the Learning Designer tool) was provided each week showing the learning outcomes and the ways that the activities were designed to enable the participants to meet them. In this way we made our pedagogy explicit and encouraged participants to apply and reflect on the theory through a series of practice, discussion and collaboration activities. For example, in Week 1 we asked participants to set up a practice course (investigate), create and modify images, embed a multimedia resource in their test course (practice), post an image to the online pinboard, Padlet (collaborate), and share their experience and application for their own teaching in the weekly forum (discussion). Acquisition came in the form of screencast tutorials, written advice and

professionally filmed panel discussions featuring innovative teachers from the BLE consortium sharing their experience. Finally, a peer review activity provided both an individual production activity to evidence learning, as well as peer feedback.

In this way, GetInMOOC foregrounded practical, social and collaborative learning and gave participants first-hand experience of using technologies for these purposes. The subsequent weeks delved deeper into these forms of learning. For example, in Week 2 participants built a comprehensive resource on technology and education together by adding pages to a wiki on technologies they had used, tagged with the six learning types from the Conversational Framework. In Week 3, participants focused on assessment, considering the role of feedback and the ways that technology could facilitate it through rubrics, peer review and digital badging.

Evaluating the effectiveness of MOOCs for teacher professional development

Existing approaches to the evaluation of MOOCs tend to focus on what happens inside the course, primarily measuring satisfaction or engagement levels. While this is important for MOOCs for CPLD, what is also needed is a measure of the impact course participation has on subsequent professional practice. An approach is needed that combines quantitative and qualitative data, and does not stop at what happens in the MOOC but considers the impact on participants afterwards, including participants' influence on others, e.g., students, colleagues, or their institution as a whole. Wenger et al.'s (2011) framework for tracing value creation in social networks or communities of practice is a good starting point for constructing such a methodological approach because it aims to track multiple sources of evidence of the value of engaging in a social professional learning activity for the members that take part. While critics may counter that a MOOC is not a social network or community of practice, Wenger et al. (2011, p. 12) suggest using the terms network and community loosely, foregrounding the importance of the blend of "individual and collective learning in the development of a shared practice". In the case of GetInMOOC, its design and development extended community knowledge about teaching with technology within the BLE, and the collaborative activities within the MOOC invited new participants to join in and share their experience and learning. A focus group with participants conducted at the end of the first run indicated that participants valued the opportunity to learn from each other, and wanted to be able to maintain the community that they had experienced. In response, we created first, an email discussion list and, later, a Facebook group to accompany GetInMOOC, which shows a sustained commitment to community. We have also involved former participants in the mentoring and maintenance of the MOOC itself, which is a tangible form of community partnership. Several organisations have set up private runs of the MOOC (see below) which offer participants more opportunity to develop a community of practice.

The Value Creation Framework is useful for the analysis of MOOCs since it supports the "triangulation of multiple sources and types of data" (Wenger et al. 2011, p. 8) including digital datasets arising from platform engagement. However, what counts as value creation cannot always be neatly defined from the outset. As a result, Wenger et al. (2011) argue that value creation should be considered in the context of narrative, suggesting that personal and collective value creation stories are constructed to bring meaning to the data.

Wenger et al. (2011) proposed that there are five cycles of value creation. The first cycle is the immediate value of the activities and interactions undertaken. This includes social support – for example, getting tips from colleagues and emotional or practical support with a difficult work problem. The second cycle is potential value, also described as "knowledge capital" (Wenger et al. 2011, p. 19) since it involves learning things whose value is to be realised later, such as skills or information. The third cycle, applied value, involves putting knowledge capital into practice, for example, trying out a suggestion. However, it is not certain that such applications of knowledge gained will be beneficial, so the fourth cycle is realised value and is the evidence of improved performance. The final cycle, reframing value, is the value that is created when participants use the evidence of impact to reconsider their goals and strategies and what counts as success. This can happen at an individual or institutional level.

The five cycles of value creation offer a complex framework to consider the kinds of data that indicate the impact of MOOCs. The Coursera platform automatically collects data that can evidence cycles 1 to 3 such as enrolment and engagement statistics, course ratings, course reviews and peer assessment submissions. At the time of writing there have been 505 content ratings thus far and 215 reviews. In addition to participants' reviews of the course, Coursera also collects 'learner stories' from participants that provide more contextualized insights into participants' motivations, experiences and practice. Thus far there are 78 learner stories. The qualitative data were analysed using a template analysis approach (Brooks, McCluskey, Turley, & King, 2015). This involved a process of familiarisation with the data before coding according to a priori themes derived from each of the 5 cycles of value creation.

It remains challenging, however, to find evidence of the later cycles of value creation (realised and reframing value) from the platform data alone, since these cycles occur once the participant has completed the MOOC. For this reason, former GetInMOOC participants who have gone on to become course mentors, share their value creation stories and contribute to this chapter. These reflections show how GetInMOOC shaped not only the practice of participants, but the ways students, colleagues and their wider institutions benefitted from their participation in the course.

Immediate, Potential and Applied Value in GetInMOOC

Enrolment and engagement data from the platform demonstrates the immediate value of GetInMOOC. At the time of writing, 30,975 participants have enrolled in the course and of these, more than half (16,345) have started to learn. The top ten countries for enrolment can be seen in Figure 1.

Figure 1 GetInMOOC top ten countries for learner enrolment

Since teachers are busy professionals, it is easy to see why other commitments may intervene between intention to study and actually studying, but the act of enrolment shows that participants perceive value in having access to the content as presented. One of the values of an 'on demand' MOOC such as GetInMOOC is that the course is available for free at any time that participants need it. The value of this is visible from the experience of Covid-19 in 2020. While universities were rushing to create materials to support teachers to shift to online teaching and learning, GetInMOOC was already available. Enrolment and engagement figures peaked between March and September 2020 during the first surge of COVID-19, demonstrating that the MOOC was available "Just In Time" as teachers sought to learn how to move their teaching online (see Figure 2).

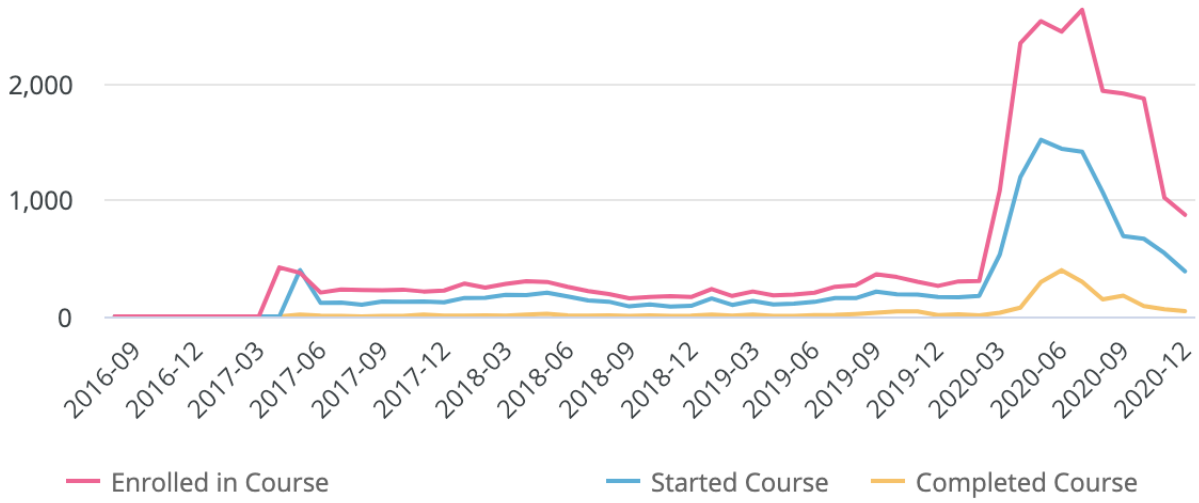

Figure 2 GetInMOOC enrolment and participation trends over time

Learner stories make this value clear. Many of the learner stories posted since March 2020 have mentioned the impact of the Covid-19 pandemic as a motivation for joining, and communicate a sense of relief at finding a free learning opportunity like this:

> After the world has been overturned by a global pandemic … we, teachers, felt so helpless. However, with your assistance and guidance, I began to breathe again. opener (Learner story, Egypt, August 2020).

> During the lockdown … we shifted to online teaching. I was shocked because I wasn't ready to teach… So, I enrolled in this course… I got deep understanding of online teaching platforms and tools (Learner story, Lebanon, July 2020).

> I was sort of compelled to take my teaching online due to the current COVID-19 situation. I was completely clueless as I had never used an LMS before or I had never taught online. However, your course not only helped me to learn but it also gave me the confidence to teach online (Learner story, India, August 2020).

The positive response to GetInMOOC is evident from participants' content item ratings who gave the course an overall score of 4.7 out of 5 from 464 ratings (rising to 4.8 for course completers). Reviews and learner stories bear this out with 158 of 196 reviews giving the course 5 stars, and positive comments indicating increased confidence in online teaching gained from participation, interaction and peer exchange:

> It felt so real, like I was interacting face to face with your team and all my peers. Sometimes I would forget that I was doing it from my house. It was also full of surprises. Every beginning of the week meant learning something new and it felt so exciting (Learner story, Kenya, September 2020)

> Thank you very much for the opportunity to learn and interact with you. This course made me more confident that I can be successful in my online class (Review, August 2020).

> It was an amazing opportunity to improve my teaching skills using technology. I got several ideas and also exchanged many (Review, July 2020).

As for potential value, the majority of reviews communicate self-reports of learning gains. For example,

> [GetInMOOC] has helped me in gaining many new skills and developed new concepts in using various technology for online teaching (Review, June 2020).

> I learned many new things [such as] .. importance of student collaboration and use of discussion forums, twitter polls, and wiki projects … feedback … choosing rubric for assessment, and appropriate use of plagiarism tools (Review, June 2020).

However, learning was also visible from participants' engagement with activities in the course. As a practical course, every week, a peer reviewed assignment was available for participants to show they had mastered the skills and understanding of that week, but there were also activities throughout the course that required participants to implement techniques and share these with their peers. For example, participants have added

hundreds of pages to the "Favourite Tech" wiki activity that invited assessments of tools in relation to their capacity to support any of the six learning types from the Conversational Framework, while other participants have rated and commented on the tools and technologies contributed. This activity, not only demonstrated that participants had understood the concepts – pedagogical and technological – but were able to implement them in their own practice by contributing to the shared resource. Another example of applied value is provided by the Twitter poll activity – participants' ability to create and share a Twitter poll can be evidenced by searching for the #getinmooc hashtag on Twitter.

These course activities, culminating in the peer review assignments demonstrated not only potential value, but applied value as well. Participants' self-reported this practical learning:

> The educational activities are designed to ensure that there must be a successful take away for participants. I have greater confidence with incorporating educational technologies in my teaching (Review, May 2020).
>
> Had a wonderful time doing this course. Most of all I actually learnt how to do things like embed Twitter feed, make badges etc on Moodle. I also learnt how to edit videos which I hadn't done before. (Learner story, July 2020).

While there is plentiful evidence of the immediate, potential and applied value for participants in the course, it is less easy to document evidence of realised and reframing value since these are more likely to happen after participants finish the course. Nevertheless, in the next section, we present compelling evidence that the course benefitted not only the participants, but their students, colleagues and institutions.

After the MOOC: Realised and Reframing Value

While course engagement data, reviews and learner stories indicate that participants were able to learn and apply what they learnt, realised value relates to what they did with this learning to benefit their students. There were also some indications that participants were taking the knowledge and skills they gained to their classrooms in the reviews and learner stories:

> This course helped me a lot to learn about the available online tools and it has made my job as a teacher not only easy but also very interesting. My students are also enjoying technology-enabled learning a lot. (Review, August 2020)
>
> The course really teaches practical tools that can be implemented even while you are attending this course. I have learned new ways to make my class more alive and interactive. (Review, July 2020)
>
> I loved applying what I learned each week with my students! (Review, April 2018)

It would be useful, however, to have more detail about what aspects of the course participants were implementing and the impact of these on students. Many of the reviews and learner stories also indicated that participants' approach to online teaching had

changed – for example, becoming more interactive and embracing learning design, which could indicate evidence of reframed value. Another, possibly stronger indicator of reframed value, is participants taking the course and embedding it within an institution's CPLD strategy for online teaching. We supported UCL to embed the course in a pre-service teacher training programme for the Post-Compulsory Education sector and the Royal Veterinary College to facilitate a private run of the course for a PG Cert in Veterinary Education and Distance Learning. These examples show that the course has supported educators to reassess their approach and adopt the MOOC as part of their provision. Other institutions who had no prior contact with us have independently embedded the course. For example, Port Said University, Egypt used the course in their post-Covid-19 CPLD for teachers, and participants have noted in reviews, learner stories and discussions on social media that their participation in the course has been motivated by their home university's recommendations, for example:

> I'm a senior lecturer … in Dow university. This course was suggested by our teaching training team (Learner story, June 2020)

Other respondents mentioned specifically that they intended to share the course with colleagues at their home university.

While these examples provide evidence of longer term and broader impact of the course, it is useful to reflect on the ways that the accumulation of different forms of value contributes to individual participants' professional development and career goals. In the next section, therefore, we present value creation stories contributed by learners who became course mentors.

Value Creation Stories from our Volunteer Mentors

The following reflective accounts are provided by four co-authors who represent the range of participants on the course, from teaching academics, to student administrators, learning designers and technologists. The first narrative comes from Carol, who demonstrates how participation in the MOOC supported her career development towards technology-enhanced learning, in which capacity she was able to share what she learnt with colleagues across her institution:

> As an administrator on a Distance Learning (DL) course, I was tasked with finding creative and interactive ways to improve student engagement on the VLE…
>
> Posting on MOOC forums allowed me to reflect on how to better support students who were new to forums or 'shy to engage'. I incorporated changes to student guidance on engaging on a forum and added advice to lecturers on how to stimulate more discussion. These small changes made a big difference, as student engagement statistics improved year on year.

Carol's narrative shows how she gained value from taking part, reflecting on her own experience as a learner, and applying what she learnt immediately to her own practice. In addition, Carol reports the realised value of seeing the effect on students, and documents

how the course transformed her own approach, her career (she became a learning technologist) and subsequently that of her institution's use of the VLE.

The second value creation story from Hifzah, a programme administrator, also reflects on the value of mentoring:

> As a mentor, I've seen the questions learners pose as well as their conversations with one another. The discussion forums are rich with ideas and interaction about how and why online tools are being employed for learning and teaching. These discussion forums are creating a community of practice and reaffirming the dialogue needed for creating supportive and challenging learning environments. There are also comments about learners needing these skills as part of their jobs, across the globe. This speaks to the relevance of the course but also the shifting trends globally in education; we must be mindful then of local context, freedom to choose how we learn and teach within those local contexts and ensure this is all discussed openly, critically and with respect.

Hifzah's reflections affirm the possibility of global MOOCs to create a learning community among the professionals they engage, whilst supporting contextualised practice.

As a lecturer in a small university with computer anxiety, Sarah's value creation story illustrates other ways that the course can reframe participants' professional relationship with technology from begrudging and limited use of a VLE as a repository, to becoming the informal EdTech advisor for the department:

> I have computer anxiety – I am very anxious about trying new things and even more so if I am expected to share my new knowledge with others. When the opportunity to engage with GetInMOOC came along I thought it might help – and boy did it! Being guided and supported to try new things, share them with others in a safe environment and with no judgement filled me with enthusiasm. I did try new things, I shared them with my colleagues in the office, I embedded them in my teaching, I became the person to go to when other staff had interaction questions. This really helped to lift my profile in the team.

Sarah's narrative shows how the MOOC enabled her to reflect critically on her existing use of technology and reframe it in ways that support interaction and engagement – she has now completed a PhD in computer anxiety.

The final narrative comes from Vicky, who is a learning designer at the University of London Worldwide, an institution that specialises in distance education. Vicky showed how GetInMOOC influenced her institution's approach to online learning:

> The course helped to inspire my institution's use of external tools in our programmes. Our previous approach was to fully embed and integrate all learning content into a single VLE. Now we are more flexible and encourage students to select their own tools for many activities …[encouraging] digital independence,

allowing students to create artefacts that they can access at any point in the future that will not vanish when their course access finishes.

Vicky's narrative provides detailed evidence of reframing value as a result of her participation. The continued involvement of mentors like Vicky and the others enables the MOOC to self-sustain, and continue to provide transformative learning experiences, like those presented here, for others around the world.

Conclusions

This chapter has presented evidence of immediate, potential, applied, realised and reframed value creation in GetInMOOC. This MOOC, which has been created with inputs from many partners and continues to be sustained with support from the learner community, was created on a strictly limited budget, but has had a major impact through engaging education professionals worldwide. This shows that MOOCs – particularly those that are designed with peer learning, interaction and collaboration in mind – are capable of providing meaningful and impactful CPLD at scale. The cost efficiency of this approach means that whenever we need to upskill the global community of teachers, MOOCs should be considered. Blending MOOCs into face-to-face courses (for example as a private run) also offers the possibility of contextualising the content for a specific cohort (Kennedy, 2021). Global events such as the pandemic have illuminated the need for rapid professional development of teachers at scale. Sadly, there will be many other crises when such "just in time learning" is required – MOOCs can provide this solution.

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