Understanding your market—the learner as consumer

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Introduction

Much of the discussion around MOOCs has focused upon the "supplier" end of the picture: the current providers of higher education and what MOOCs may mean to them; the new organizations that have emerged to create and provide MOOC platforms; the possible new entrants into the higher education market, who may reap the benefits of the MOOC development curve in order to develop their position and market share.

While engaged in these important and interesting discussions, we should not forget that the reason that MOOCs have gained such profile and importance so quickly is because their growth has been fuelled by consumers and not by suppliers. Early MOOCs not a carefully thought-through business proposition with a clear rationale, target audience, and business model. It is the fact that consumers—or learners—have voted with their keyboards to engage with MOOCs that has led to the current multi-million pound investment in a series of unproven start-ups. Added to this is the potential brought by combining networked technologies with big data and new analytic tools. we have a unique opportunity to find out more about learners when they engage in online learning, and to adapt our educational offer to their requirements, than at any other time in the past.

It would be a mistake, though, to act as if MOOCs are being developed in a vacuum of previous broad and deep understanding of what is needed to create "good" online learning experiences. Online learning has been developing and growing over the last 20 years, with many thousands of online courses developed using a range of different technologies, tools, and pedagogic approaches. From the beginning, both teachers and those supporting online learning, specialists such as learning technologists and educational developers, have evaluated online learning and reviewed its efficacy. In the last 10 years, there has been particular emphasis on the deeper understanding of how online learning can be best constructed so as to provide the best possible learning experience. In this section, we will identify those areas of learning that are most crucial for the development of good practice in creating MOOCs that is likely to recruit and retain MOOC students, and so result in good return on investment.

Understanding learner motivation

Understanding what motivates learners to learn effectively is one of the keys to successful education, and not surprisingly, there has been detailed research into this area over many years.

To MOOC or Not to MOOC. http://dx.doi.org/10.1016/B978-0-08-100048-9.00016-0

More recently, research has been carried out to understand more about the motivation of learners in an online context. This research holds significant potential to help understanding of online learning, and can be particularly useful in the design of MOOCs, where motivation is such an important and unknown influence—why do some MOOCs attract hundreds of thousands of potential learners, but have very low completion rates? What attracts someone to sign up for a MOOC in the first place, and how should a provider attempt to retain their interest in the MOOC, once it has started?

This is a complex area because of the many contributing factors that are present, and there is no simple answer to the questions posed above. However, research has helpfully indicated some of the key issues that need to be addressed in considering learner motivation.

More helpfully, recent research concludes that there is a complex relationship between the learner and the learning opportunity which is influenced by a range of motivating factors—put simply, a learner may be motivated by different things and respond in different ways, depending upon what they are trying to learn, in what context, and who else they are learning with. So there are both intrinsic traits in learners and factors, in the learning environment, that will motivate the learner which can lead to either a successful or unsuccessful learning opportunity (Hartnett, St George, & Dron, 2011).

The following quote gives helpful guidance:

> *Practitioners need to be cognisant of the important role they play in influencing learner motivation when designing learning activities. Most importantly, the relevance and value of the task (e.g., online discussions) need to be clearly identified and linked to learning objectives to help learners understand how the activity can aid in the realisation of personal goals, aspirations, and interests, both in the short and longer term. By offering meaningful choices (i.e., not just option choices) to learners that allow them to pursue topics that are of interest to them, the perceived value of the activity is further enhanced. Finally, by establishing frequent, ongoing communication with learners, where they feel able to discuss issues in an open and honest manner, practitioners are in a better position to accurately monitor and respond to situational factors that could potentially undermine learner motivation.*
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> *Hartnett et al. (2011)*

What should we take from this quote when we plan to design MOOCs? Firstly, design of the environment is very important—and here we are using a broad definition of design that encompasses the type of support and encouragement that is used, and not just the learning platform. So, for example, the use of weekly e-mails to remind the learner of their progress so far on the course and to highlight progress of their peers is one approach to increasing motivation. This relates closely to the topic of learning design, which we will discuss in more detail below.

Secondly, we need to take into account that behaviors associated with engagement with MOOCs are not simply focused upon learning attainment; the apparent lack of interest in accreditation as a major motivating factor for studying within a MOOC is evidence of this. Some of the elements that motivate learners to engage with MOOCs may be more allied to other contexts where education and entertainment come together

and boundaries blur. Some of the literature that is relevant here is about consumer behaviors rather than learning behaviors—and it is perhaps no coincidence that there is a high level of engagement of marketing professionals in the teams that are choosing and creating MOOCs, who are clearly contributing their particular expertise, in understanding what attracts and engages potential consumers, into the decision-making process.

Learning design

Learning design can be described as "the description of the teaching-learning process that takes place in a unit of learning (e.g., a course, a lesson, or any other designed learning event)" (Koper, 2006). The term learning design is similar to others that are widely used in the literature of course design and pedagogy, including terms such as instructional design and curriculum design. Learning design is appropriate to our discussion because it includes the design of the whole experience—the learning objectives that will be attained, and how this will happen, including both planned instructional materials and also the associated activities that support the learning process, including learner–learner or learner–teacher interactions.

When planning online learning, it can be easy to focus upon the tools and technologies that are available and to frame the learning design around them. So, for example, the course must be planned in terms of the number of multimedia elements that will be included, and the number of topics covered, rather than starting from a point of articulating the planned learning objectives, and then analyzing the range of tools and techniques that are available that will best enable the learners to meet those objectives.

Frameworks such as the "7 Cs toolkit" have been developed in order to provide supportive structures and guidance for those who are designing learning activities (Conole, 2013a). The 7 Cs are "conceptualize, capture, create, communicate, collaborate, consider, and consolidate" and are used to underpin a set of 21 "e-tivities" which the learning designer works through in order to plan the learning experience. These have been tested out with large numbers of teachers in order to ensure that they are useful. The 7Cs toolkit is available for free use from the Beyond Distance Research Alliance (2014).

When planning MOOCs, you may be limited in choosing your learning design by the platform that you are working with, but it is still advised to support the MOOC design team—probably the academic leads, learning technologists, and perhaps educational developers, working together—to take time initially to plan out appropriate learning designs for each MOOC. It may be your wish whether to specify a particular learning design approach that will be used for all your MOOCs, or choose different learning designs for different audiences and subject areas. MOOCs are no different to other forms of online learning in that the construction of the learning sequences is just as important as the selection of content, and given how little you may know about your cohort of MOOC users,

it is even more important to do all that you can to support them through the learning process.

In terms of MOOC-specific learning designs, MOOCs are sometimes characterized quite crudely as either cMOOCs or xMOOCs. As discussed earlier, cMOOCs are "Connectivist MOOCs" that use the educational theory of connectivism as their underpinning; while xMOOCs do not ascribe to an explicit pedagogic theory or model, but tend to focus on simple pedagogic models that communicate materials in an instructional way, rather than being learner focused.

xMOOCs		**cMOOCs**
Scalability of provision	Massive	Community and connections
Open access—restricted license	Open	Open access and license
Individual learning in single platform	Online	Networked learning across multiple platforms and services
Acquire a curriculum of knowledge and skills	Course	Develop shared practices, knowledge, and understanding

The different characteristics of xMOOCs and cMOOCs are captured clearly by Li, Powell, and Olivier (2014).

These distinctions are not very helpful, however, as the xMOOC label, in particular, is an overly simplistic way to describe a multiplicity of different practices and approaches.

Chapter 3 provides one simple way to analyze existing MOOCs in order to better understand the various aspects that need to be included in planning. A more comprehensive and pedagogically driven approach has been taken by Grainne Conole who has done valuable work to analyze MOOCs according to 10 dimensions of MOOCs (Conole, 2013). The example below shows how she has mapped five different MOOC courses against the 10 dimensions in order to analyze the approach that each MOOCs has taken. This approach can provide a useful checklist for MOOC designers against which to analyze the ambitions for a new MOOC, and to look at the design of a current MOOC. This is an evolving methodology which will be useful to monitor further as it develops (Table 16.1).

Learner support

Supporting learners online is much broader and more complex than just supporting online discussions and there is a wealth of research developed over many years in order which discusses learner support and advises upon good practice. Local learning technologists and educational specialists will be able to advise but in addition, excellent sources of guidance include work by Helen Beetham, Diana Laurillard, and Gilly Salmon.

Table 16.1 Mapping five courses to the 10 dimensions of MOOCs

Dimension	Low	Medium	High
Open		H817, OE, AI	CCK, OLDS
Massive	OLDS, H817, OE	CCK	AI
Use of multimedia		CCK, OLDS, H817, OE	AI
Degree of communication	AI	OLDS, H817, OE	CCK
Degree of collaboration	AI	CCK, OLDS, OE	H817
Learning pathway	CCK	OLDS, H817, OE	AI
Quality assurance	CCK	AI, OLDS, OE	H817
Amount of reflection	AI	OLDS, OE	CCK
Certification	CCK28	OLDS, AI	OE
Formal learning	AI, CCK	OLDS	H817, OE
Autonomy		H817, OE	CCK, OLDS, AI
Diversity		H817, AI, OLDS	

Table reproduced from Conole (2013b).

In considering what support is needed for learners in a MOOC scenario, it is important to ensure that the full breadth of support needs is considered. Online support to learners can be described in many ways; one useful suggestion is to break down online learner support into three categories: technical, academic, and study skills support (Morrison, 2014). Technical support includes helping the learner to connect to systems, to navigate the MOOC platform, and so on. The level of support that may be needed to resolve technical queries should not be overlooked, as failing to access systems is an important factor in demotivating students. A large percentage of this support is administrative support (passwords, questions about assignments) and also the broader type of interaction that goes beyond the specific activity, or assignment—where the learner feels supported as part of the learning community of the institution. Study skills support is a more general support that is available to help the student to acquire or hone their general abilities in learning online, perhaps to understand how to undertake academic work, how to plan their time and so on.

There is a lot of high quality, free guidance available to support planning online learning and the important element of learner support. For example, at the online learning insights Web site, there is a model for how to support online learners through their learning journey (Morrison, 2012).

For MOOCs, the team will need to decide what level of support you are able to provide, and to be clear and explicit with learners about what they can expect from you in terms of support. The level of academic support that is provided is one of the key decisions to make in designing the MOOC. This type of support is one

of the key differentiators between face-to-face and virtual instruction, as there is a wide range of possible models for learner support, from none or very little, to one-to-one support. Experienced online providers put a great deal of time and effort into getting this right—and following through the student life cycle, from initial enquiry through application, studying, graduation, and continuing a relationship as an alumnus. For MOOCs, the typical approach is to provide limited academic support, usually within a one-to-many environment such as discussion forums, rather than individually. There is also an emphasis on using peer support, again through discussion forums, to discuss assignments and to answer queries. As was outlined in the case studies, some institutions provide additional support through volunteer or paid postgraduate students who monitor the relevant discussion forums, answer queries, and provide guidance.

It is essential to be realistic from the start about type of learner support that will be provided. Research that has been carried out in open and distance learning has identified ratios of about 25 students to 1 tutor as the minimum required in order to achieve good completion rates and these are the learner–tutor ratios that are used by the UK Open University and other distance learning providers (Tait, 2003). For a MOOC which has 5000 students registered, this would mean providing 200 tutors! Recent research by Diana Laurillard and colleagues has shown that it may be hard to exceed these ratios at present for learners studying online, notwithstanding the new tools and technologies that are available, unless you use a different pedagogic model: "The variable cost of high quality support *does not achieve economies of scale* if you maintain the same pedagogy" (Laurillard, 2013). We are not yet in the position where adaptive and personalized learning systems are sufficiently sophisticated to provide viable new models.

One of the typical models of MOOCs is to use other learners to support each other to interrogate and understand the learning materials, activity which is valuable in its own right, but research has shown that learners tend to do better with higher levels of support from academic specialists, and also that regular support from academic specialists can have a marked impact upon completion rates for MOOCs. You may instead need to consider whether there are other ways to support learners, such as by employing students or postgraduates as online teaching assistants, for example to monitor discussion boards and add academic input.

One of the difficult challenges presented by planning MOOCs is that you do not usually know your student numbers far in advance of running the course. So you may need to be able to scale your level of support up or down, depending on the number of registrations—and the number of registered students who actually participate in the course. In terms of administrative rather than academic support, this may include a generic e-mail address or discussion board to which enquiries can be addressed—in which case you need to be clear and explicit about response times that they can expect. You will need to ensure that administrative support staff are available to provide what is needed, and bear in mind that students are likely to be located in many different time zones, so may have expectations of support 24 h per day.

MOOC content and flipping the classroom

Interesting models are also developing for the use of MOOC content as part of a blended learning approach, where some or all of the content of a MOOC is used by an educational institution other than the one which developed it (Kolowich, 2013). In many cases, this is as part of a blended learning experience, where students access some or all of the MOOC content before they come into the classroom, they may carry out assignments, tests, and so on, and prepare materials before they meet for face-to-face contact with tutors and other students.

This is typical of the "flipped classroom" approach that has been much discussed in recent years—where engagement with learning materials takes place outside the classroom, in advance of classroom, seminar, tutorial, or laboratory time, rather than using face-to-face time in order to "transmit" information. Some would argue that this is not a new phenomenon and that the label is now at times being misused (Sams, 2011). It is obvious that in many disciplines, in particular the humanities, it is usual practice to require learners to engage deeply with reading materials and other resources outside the formal teaching situation. However, the flipped classroom debate has provided a helpful focus upon the value of using technology as part of a blended learning approach, and there is no doubt that the range of resources in many media that can now be made available to learners can provide different, and sometimes more accessible, attractive, or appropriate, ways for the learners to engage with concepts. It is particularly helpful to discuss the flipped classroom model when one of the developing MOOC models is for institutions to license content from other institutions and use it with their own students in a "flipped classroom" scenario.

To draw an obvious parallel: the use of a MOOC is similar to the approach that is taken to using text books as a key "course reader" or key text book. However, it can go much further than a text book because the student is able to engage with a richer set of materials in many different formats, and also to engage with other learners and tutors, in an informal and self-directed setting. There is almost unlimited potential to provide creative and new approaches to learning content through an online environment.

Conclusion

MOOCs are turning the traditional higher education proposition on its head, as they are allowing students to choose to learn from a huge range of different small, granular course offerings, rather than committing to a single institution and being limited to their courses. In order to compete in this new, more competitive and dynamic educational environment, it is essential that institutions understand more about the motivation of learners, in particular within the online environment. They also need to give careful and expert consideration to the design of the MOOC itself, drawing upon best practice. Current MOOC platforms may be limited in the media and learning design that they allow, but they will become more complex and sophisticated over time; and there are many other options for institutions to

explore and include in experimental MOOC offerings, that can inform their choice of learning content and learning design for both online and blended learning experiences.

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