

Liberating learning: experiences of MOOCs

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Foreword

It is exciting for the Higher Education Academy (HEA) to publish this report – the third on massive open online courses (MOOCs) within a year – and to explore from a further perspective some of the challenges that MOOCs have presented to higher education. We are grateful to our colleagues at the University of Southampton for conducting this research, which focuses on understanding the experience of learning on a MOOC and, in particular, the part played by learning resources in supporting learner engagement and success. Paying attention to the specific experience of individual learners, as this report does, and feeding the data gained by in-depth interviews back to those responsible for designing and tutoring on the MOOCs, has allowed new insights relating to the MOOC phenomenon to emerge. This complements the growing understanding of MOOC pedagogies and of learner engagement in MOOCs provided by the HEA's first two reports: *The Pedagogy of the Massive Open Online Course: the UK View* (HEA 2013), and *Engaged Learning in MOOCs: a Study Using the UK Engagement Survey* (HEA 2014). In this third report we gain insights into the views and experiences of interviewees once they had finished their studies. Four themes emerged that provide an overarching synopsis: the fact that MOOCs were flexible, fascinating, and free made for a positive and attractive learning experience; a feeling of being part of something contributed to motivation and staying power; the wide variety of aspects of learning – including time invested, the organisation and pacing of learning, and the ways in which different formats and resources supported learning – were important factors; 'proof' of study, through some form of accreditation, however, attracted little interest. The report proposes a useful continuum that connects two primary reasons for study: personal enjoyment, and learning for work or professional reasons, and juxtaposes these against whether learners study alone, or participate strongly in social interaction. The typology provides a way for educators to audit the design of their MOOCs and to incorporate features that, based on the findings of the research, they suggest are likely to enhance the learning experience even more. In conclusion, the research team identifies a number of areas for development in future practice that apply to MOOC designers and planners; educators; researchers and higher education providers; and, unusually but pertinently, to learners themselves.

MOOCs are still a relatively new phenomenon in higher education worldwide, and it remains unclear what their future is within the sector. This is not the place for that debate to air. However, in engaging with various dimensions of MOOCs, the Higher Education Academy is pleased to be contributing to helping higher education providers to make informed decisions about some of the big questions that revolve around the quality of teaching and learning that takes place, and how that can be enhanced.

Professor Philippa Levy

Deputy Chief Executive, Higher Education Academy

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Executive summary

Introduction

Research into MOOCs – massive, open, online courses – is proliferating as they become increasingly popular in the UK. Their ‘massive’ nature is tending to attract researchers’ and policy makers’ attention. Some predict growth and diversification while others suggest numbers have peaked. Questions of particular interest focus on the number of people registering for these courses, the point at which people cease to continue, and the number of people completing them. Such factors are understood to indicate popularity and success in an increasingly competitive environment.

Whether or not MOOCs will ‘disrupt’ higher education or offer alternative routes towards it remains highly contested, although even critics acknowledge the subversive potential of free, open, modularised education. Their quality and sustainability is under scrutiny, and is set to become more so should academic accreditation become part of the offer. For these reasons, it is increasingly important to discover more about learning through a MOOC from those who do so. Among other things, how quality is understood by learners, what leads people to complete courses, and the role of social learning are currently under-researched aspects of the new courses.

The study reported here sought in-depth accounts of learning on a MOOC from ten people who completed one of the University of Southampton’s first two such courses during 2014. Its goal is to better understand their motivations for studying in this way, and the learning opportunities and problems they encountered. Findings were discussed with five academics involved in leading, developing and teaching on the MOOCs in order to explore issues from both perspectives. Given the small-scale nature of the project no specific recommendations are made as a result of it. Instead, the final paragraphs offer reflections from the project team about how the research is likely to impact their own practice in the future, and suggestions about how learners might make the most of the opportunities MOOCs offer.

Background and literature

Following extensive research into learner numbers, characteristics, patterns of drop out and completion of MOOCs, qualitative research is beginning to be reported that focuses on the learner experience. Findings suggest ‘teachers’ remain very important to learners, and that both pedagogy and curricula have the potential to be more responsive to learners’ needs.

Engaged learning in MOOCs is of increasing interest and likely to become more so as the quality of learning has been criticised in a recent overview (Mapstone, Buitendijk and Wiberg 2014). When MOOCs offering academic accreditation are included in institutional review, forms of evaluation will be required that are capable of measuring quality in terms of teaching and learning approaches as well as learner experience. Understanding more about the learner experience – so different from that of the traditional higher education student – is important in moving beyond the ubiquitous concept of satisfaction.

This project asks how learners describe their experiences of learning with the purpose of supporting MOOC developers and educators to learn more about their diverse cohorts and to share good practices. Learners’ personal motivations, their approaches to – and organisation of – learning, and the many different ways of using teaching resources, are all discussed and reflected upon by volunteer research participants.

Methods

Following ethical approval, individual in-depth interviews were conducted with ten people who completed one of Southampton’s MOOCs during 2014. Of 229 who volunteered for interviews, purposive sampling led to the recruitment of ten people currently resident in the UK, from different occupational backgrounds, and aged from under 25 years to over 66 years (age-related questions were in bands). In terms of their educational backgrounds, interviewees spanned all levels from secondary school qualifications to doctoral and

professional academic awards. All had volunteered during week six of their particular MOOC, and several had completed other MOOCs across the same time period. They can be seen as unusual in this regard, given that the majority of people who begin MOOCs do not complete them.

Interview schedules provided a framework and scope for supplementary questions. Each interview lasted between 50 and 90 minutes.

Four themes were developed from interviews and discussed with five educators, who had been involved in developing and facilitating MOOC sessions. This was a small-scale project, and while the findings and themes are informative, they should not be interpreted as widely generalizable or representative of all MOOC learners.

Findings

The four themes constructed from learner interviews are:

- 1 Flexible, fascinating and free
- 2 Feeling part of something
- 3 Ways of learning
- 4 A bit of proof?

1. Flexible, fascinating and free

This theme captures the motivations of interviewees. Many saw themselves as ‘finishers’, either squeezing MOOC learning into busy lives or structuring free time around demanding self-imposed learning schedules. A high level of mental stimulation, high quality learning resources, and being able to work flexibly and at their own pace were key attractive features of MOOCs. Scope to experiment with new topics, knowing there were no financial costs or commitments to being assessed, also emerged as a major attraction of MOOC learning.

2. Feeling part of something

The social learning generated by certain activities – notably the discussion forum, reading or posting questions and replies, sharing resources, and to a lesser degree using social media – all contributed to a sense of being part of a community of learners. This extended to those who only participated in passive ways, as a great deal of gratitude and appreciation was expressed to more active contributors. Many talked of the global community, being very inspired by conversations with people studying the same subjects from very different geographical and political environments. The enthusiasm and online presence of educators was found to be engaging and interesting.

3. Ways of learning

This theme describes in detailed ways interviewees’ organisation and use of various learning resources. It presents very different views of the place of video, video transcripts, journal articles and quizzes. Progressing through MOOCs in a step-by-step way, rather than ‘dipping in and out’, comes across as the preferred approach as it allows people to ‘keep up’ and converse with peers about weekly topics. Although quizzes were not universally popular, interviewees’ ideas and suggestions for helpful activities are offered.

4. A bit of proof?

Interviewees were sceptical about the various ways in which their learning through MOOCs could be ‘verified’. They also revealed a cost sensitivity when asked whether they were prepared to purchase additional resources or further accredited tests. Their personal motivations for MOOC study did not generally include progressing in higher education. Just one was considering purchasing a certificate of completion.

Discussion and recommendations

The discussion includes MOOC educators' comments and reflections on interview themes, enabling different perspectives to be considered. Like interviewees, educators were committed to the free and unconditional nature of MOOC learning, and each had very specific reasons for being part of the Southampton initiative. Unlike interviewees, some expected a much more selective and strategic approach to learning to be the norm. New demands on educators included managing difficult online exchanges among learners and responding to requests and complaints rapidly and constructively.

New insights are provided by the research into the process of peer learning and the ways in which MOOC learners help each other to grasp difficult ideas and to persevere. The role of educators emerges as an important component of engagement and social participation. 'Massiveness' and global reach prove to be unique parts of the attraction and stimulation for learners and educators, although a risk of an exclusive reputation requires MOOC marketing and promotion to be inclusive and accessible.

A four-quadrant model is proposed for encouraging different forms of engagement with MOOCs, adaptable to particular MOOCs and to individual needs as they change throughout the learning journey.

In conclusion, MOOCs emerge from the research as a unique form of learning, embraced and enjoyed by the research participants *because* of their cost-free and unconditional nature rather than as a substitute for expensive alternatives. Interviewees describe the MOOCs they have studied as high-quality and very worthwhile *supplementary* learning activities, useful for such things as: preparing to return to work or finding new challenges outside of work, remaining mentally stimulated during retirement, and providing new types of intellectual stretch during formal periods of education. A wide variety of teaching and learning approaches is necessary given the diversity of learners. Little interest is evident in more formal kinds of accreditation, reflecting the motivations of the research participants.

Many educators becoming involved with MOOCs will require support, new skills – particularly in social media presence – and training in the management of online interactions.

Given that this was a small-scale study, no specific recommendations are made. Instead, the research team offers a brief summary of pointers and insights arising from the project that are likely to impact the future practice of MOOC planners, designers and educators. These fall into the broad categories of ensuring that content is provided in as wide a variety of formats possible; offering clear guidance to learners in areas that will support their time management, access of resources and signposting of difficult exercises; and the importance of collaboration between designers, educators and academic librarians. The importance of MOOC *netiquette* is emphasised. As a team of researchers, further investigation into the nature of the 'global classroom' is hoped for.

There are also lessons for learners to engage with. The need for involvement in discussion forums, providing feedback to the MOOC tutorial team, seeking opportunities to apply their learning, and developing ways of pacing themselves, are all aspects of learning through MOOCs that are likely to enhance their overall experience.

Introduction

Massive open online courses (MOOCs) have recently increased their profile in the UK with the launch of the FutureLearn collaboration in 2012. Courses have proliferated and are now attracting attention and scrutiny from new quarters. Some reports predict a downturn in numbers (see Allen and Seaman 2013) while others see new possibilities for diversification and niche opportunities (Yuan and Powell 2013, p. 6).

More informed analyses, beyond trend data and satisfaction surveys, are helping educators to understand learners' motivations and educational experiences in greater depth (Zutshi, O'Hare and Rodafinos 2013). Impressions formed through social media or discussion forums are also offering new insights (Eynon 2014).

MOOC learners' accounts of their learning are the focus of this Higher Education Academy (HEA) funded inquiry. A small-scale study using in-depth interviews explored learners' experiences of MOOCs, including the ways in which they studied and used resources. Findings were shared with MOOC team members, whose responses form part of the discussion. Recommendations suggest ways of encouraging and supporting forms of online learning that are associated with forms of engagement.

Background and literature

MOOCs have been found to serve as excellent outreach activities for universities, promoting world-leading research and 'in-reach' to schools and colleges (Parr 2013), although a sustainable business model is proving elusive (BIS 2013). There continues to be much discussion about their purpose and target audience, as they continue to attract high numbers of graduates and an older demographic (see Grainger 2013). A focus on numbers and completion rates has taken priority over research into those who study MOOCs, their reasons for doing so and their experiences, to the point that Brabon (2014) has referred to the "unknown learner". Their voices remain largely absent from this growing body of work, although this is beginning to change (see Zutshi *et al.* 2013).

Research into educational experiences can be complicated; accessing large datasets when third party providers are involved requires their approval¹ and recruiting individuals to research projects poses ethical and practical problems. Online MOOC learners may make no contact after sign-up and effectively remain invisible to course teams. Using people's words from blogs and forums (often called Internet-mediated research) similarly requires permission (see British Psychological Society 2013) and has its own challenges. Much of this is new territory for universities who are used to owning their students' data and being able to approach them directly for research purposes.

Research and evaluation is likely to have an increasingly influential role in the development and marketing of MOOCs. A new emphasis on quality, recently described by the Quality Assurance Agency for Higher Education (QAA 2014), will require MOOC providers to think in more focussed ways about their role and purpose. Those attracting academic accreditation will be included in institutional reviews. Quality has emerged from a recent review as a potential problem, despite the high level of trust placed in university provision (Mapstone, Buitendijk and Wiberg 2014).

Barber, Donnelly and Rizvi (2013) offer a vision of a mixed economy of modularised education driving costs down, but such provision would require considerable attention to quality. Research suggests active and deep learning is vital to the success of short online courses (Vihavainen, Luukkainen and Kurhila 2012). Guàrdia, Maina and Sangrà (2013) developed design principles – in collaboration with learners – that place pedagogy at the heart of MOOCs, over and above institutional objectives. Bayne and Ross (2014, p. 57) suggest that, "MOOC pedagogy is not embedded in MOOC platforms, but is negotiated and emergent." The pivotal role of

¹ See for example FutureLearn statement on research ethics. Available from: <https://about.futurelearn.com/terms/research-ethics-for-futurelearn/> [accessed 4 August 2014].

the academic librarian is also being recognised, given how rules of copyright, forms of access to online resources, and the need for digital literacy are influencing MOOC content and “shelf life” (Gore 2014).

Kennedy (2014) usefully reviews the literature on the traditional distinctions made between types of MOOC, encouraging clarity of purpose. In similar vein, Brabon (2014, p. 3) asks if the stated purpose of MOOCs in the UK – to widen access to those without traditional qualifications – has served instead to “foster misalignment”. He raises the important question of whether the very act of seeking to accredit MOOCs will diminish their accessibility and attractiveness. Plans to charge for examinations at regional centres are part of a wider movement to accredit learning in innovative ways (Sharples, McAndrew, Weller, Ferguson, Fitzgerald, Hirst and Gaved 2013) although Hill (2012) questions practical issues; for example, how students’ identities might be authenticated.

Rationale for research

The environment remains alive with risk and creative potential. Understanding the experience of learning on a MOOC, particularly the part played by learning resources in supporting learner engagement and success, is important to quality and innovation.

Research question

Given this overall context, this project focuses on learners’ experiences of MOOCs, and focuses on two central research questions:

- How do MOOC learners describe their experiences of learning?
- What can MOOC designers and educators learn from their accounts?

Methods

The study was commissioned by the HEA with a time frame of April 2014 to July 2014. The small-scale nature of the project mirrors that of many case study-approaches to research in order to define its scope, purpose and limits (Stake 2000), although this was not followed through in terms of acknowledging and exploring the wider context of the MOOCs studied and of the individual contributors. Two University of Southampton MOOCs were used as representative examples of FutureLearn-based MOOCs. Ten UK-based learners and five MOOC education team members provided interviews which were used to elicit perspectives on the experiences of participating in a MOOC. Recruitment was through an existing survey-based research project. Small numbers were recruited to achieve depth and descriptiveness, and a focus on learner experience. Following early theme generation from learner interviews, educators were invited to contribute to the discussion through individual interviews.

MOOC learner recruitment strategy

Of all respondents to an earlier study (reported in Wintrup, Wakefield and Davis 2014), a total of 229 had indicated an interest in being invited to participate in further research. A process of contacting UK-based volunteers ensued with the goal of recruiting a diverse cohort – across age groups, gender, occupation and employment, with and without disability, and with different educational qualifications – until ten interviews were conducted. Those hardest to recruit were people in the two younger age bands and those working full-time or part-time, although this was eventually achieved.

Ethical approval to conduct research

Ethical approval for the research was gained through the University of Southampton's Faculty and University Ethics Committee system (ERGO/FoPSE No. 9825). Volunteers were sent information letters, indicative interview schedules, and consent forms via email with reminders of their right to opt out at any point or to have data withdrawn prior to analysis. Given names, job roles, and any identifying characteristics have been modified to maintain confidentiality.

Permission to reproduce tweets was sought from their authors, none of whom were research participants.

All identifying information is securely stored, separately from anonymised interview transcripts, which are also password protected on NVivo software, and in accordance with requirements of the University Ethics Committee and Data Protection Act (2012).

Interviews

To answer the research questions, an exploration of personal accounts and rich descriptions of particular learning resources (Downes 2001) was called for. This meant that individual interviews were the method of choice. Distances were considerable so telephone and Skype offered a practical and effective alternative to face-to-face interviews (Deakin and Wakefield 2013).

An active interview approach was guided by the techniques of Holstein and Gubrium (1995), enabling expert-to-expert conversations, questioning and clarification of meaning. Interview schedules (Appendix I) provided a framework and scope for supplementary questions. Each lasted between 50 and 90 minutes and generated 103,069 words in total.

Limitations

The methods adopted imposed certain limitations on the project:

- interviewees were invited to participate in research during week six of their six-week courses, so reflect a sub group of MOOC ‘completers’, themselves an untypical group;²
- current UK residency was a practical necessity and reflected the UK focus of the study;
- individual MOOCs are not named because interviewees had completed several and referred to them interchangeably, contributing from experiences with a range of provider institutions;
- people in younger age bands were harder to recruit, usually for practical reasons;
- age was not asked, only age band;
- there is no attempt on our part to generalise findings from ten people to the many thousands of MOOC learners.

Analysis

Themes were generated from literature and compared with data following interviews. Interviews were audio recorded, transcribed and stored using NVivo software.

Following Braun and Clarke’s (2006) six-stage thematic analysis, interviews were read, re-read, and coded to capture all data items. Themes were searched for in the coded data. Three early themes were constructed and reviewed. One was split into two, named, and further reflected upon prior to write up. Specific responses to emergent themes were captured from five MOOC education team members.

² Learners’ own descriptions suggested they undertook several or all course activities but this is not possible to know or verify; we can only say with certainty they remained involved with the MOOCs at week six. We offer only their words and views on this concept.

Public data sources

Box 1.1: Twitter



Searching Twitter (an online social networking and micro-blogging service that enables users to 'tweet' by sending and reading up to 140-character messages) using @UOSFLwebsci and @UOSFLOceans.



Twitter users were tweeting (often using the hashtag #FLwebsci or #UoSFLOceans) about their MOOC experience from November 2013.

The people responsible for the tweets below gave permission for them to be reproduced here.

Box 1.2: Tweets highlighting forms of social media outside the MOOC

RETWEETED BY WEB SCIENCE MOOC



Simon Fogg @srjf · Nov 7

@tywarnstreet a fellow #FLwebsci classmate :) you seen the Google + community? plus.google.com/u/0/communitie... for help just ask on there or here



[View conversation](#)



RETWEETED BY EXPLORINGOUROCEANS



Paris @Paris St V · Feb 5

#UoSFLOceans

Cool map showing how we thought of oceans. Who says monsters don't exist? by Arthur Correa @UoSFLOceans padlet.com/wall/exploring...



[View summary](#)

Box 1.3: Tweets recommending alternative resources

RETWEETED BY WEB SCIENCE MOOC



Harith Alani @halani · Nov 15

Get ready - CFP WWW Web Science Track (6 page papers), Seoul, Korea. Ddline 16 Dec. www2014.kr/calls/call-for... #kmiou #webscience #www2014

🔄 7 ⭐ ...

RETWEETED BY EXPLORINGOUROCEANS



Joshua Allin @JoshRAllin · Feb 5

Greenland glaciers reaching record speeds: 46m PER DAY!!! That can't be good news ow.ly/tipTw #FLUoSOceans @UoSFLOceans

🔄 2 ⭐ 1 ...

Box 1.4: Tweets that share experiences

RETWEETED BY EXPLORINGOUROCEANS



Adrian Nightingale @a_m_nightingale · Jan 14

I just signed up for my first MOOC. Curious to see how this online learning lark works.

futurelearn.com/courses/explor...

@UoSFLOceans #FLUoSOceans

🔄 1 ⭐ 2 ...

RETWEETED BY WEB SCIENCE MOOC



Ramya Srinivasan @rum sr · Nov 12

#FLwebsci and #edcmooc are changing my perspective on technological determinism & the web - #MOOC

🔄 1 ⭐ ...

Box 1.5: Interviews: social media and educators' presence

Some interviewees found educators' online profiles and social media presence interesting.

Aled: I actually looked at the University website to find out who everybody was.

Bill: It's always interesting to see what they're doing, where they're [researching].

Asking a specific question of a course leader elicited an immediate answer via Twitter:

Bill: I took a photograph ... and looked through my books and I couldn't find it, [MOOC course leader] got back to me within a couple of hours and said they're quite common ... I thought that was very good.

Educators also enjoyed the contact and new opportunities to disseminate work:

[referring to colleague] ... he's on Twitter and so I then tweeted a link to his article and said ... 'here's a blog post I wrote' and then he retweeted it.

I always put my twitter username in slides, I also blog about my PhD and so will link to various posts.


Findings

Interviewees were generous in interviews, describing their views and experiences in detail. Four themes were constructed:

- Theme one: flexible, fascinating, and free
- Theme two: feeling part of something
- Theme three: ways of learning
- Theme four: a bit of proof?


Theme one: flexible, fascinating, and free

Although motivations for wanting to study varied, mental stimulation was often mentioned.



Daniel
has a Master's degree, is now retired and previously worked in Information Technology. Between 56 and 65 years old.


Daniel: "I'm retired and I wanted to keep my mind a little bit active."



Aled
is a pharmacist, educated to postgraduate level, returning to work after a period of ill health, now disabled. Between 46 and 55 years old.


Aled: "I've been out of work for a number of years due to ill health, my brain is dripping out of my ears."

Katie: "I need to keep active while I'm waiting for my [PhD] viva."



Katie
has just handed in her PhD thesis, is awaiting her viva and working full-time for a voluntary sector care agency. Between 36 and 45 years old.


University websites were the first point of contact for those already thinking about learning.



Emily
previously worked in a managerial role, was formally educated to secondary school level and is currently not available for work. Between 46 and 55 years old.

Emily said: "The OU sent me a link". Others heard through friends or in Peter's case, "a work colleague". For Katie, future employability was a consideration: "I read a newspaper article about it ... and I thought that would be useful in the job market."

Educational goals were important to Jamal, who saw the MOOC as a way of broadening his knowledge: "I want to explore, I don't see myself as just in [my subject area] ... I also learn about the environment. I would like something else."



Jamal
is an international student currently studying a STEM subject full-time at a UK university and is aged between 18 and 25 years old.



Ella

is a graduate, currently working as a full-time parent. She is planning to begin a Foundation Degree and is between 36 and 45 years old.

Ella, already a graduate, wished to begin a Foundation degree in a new topic, so selected MOOCs very purposefully: "That's why I chose the ones that I did."

For those with less specific goals, a general desire simply to learn new things and be stimulated was important.

Laura: "I'd worked full time for 40 years. There's a whole new world outside of work."



Laura

is retired and previously worked in an international role. Educated formally to secondary school level, she is between 56 and 65 years old.

Studying several MOOCs at once, in topics as diverse as dentistry and history, was not uncommon. Aled felt 'addicted': "I actually get withdrawal symptoms. I will continue to be a MOOC addict after I've gone back to work."



Rachel

is not available for work. After being formally educated to secondary school level, she worked in a local Welfare Benefits Office and is now aged over 66 years.

High quality was commented on. Rachel thought that "The quality and the quantity of what was there were really clear ... really excellent, stimulating, very enlightening." New knowledge and stimulation was important for Daniel. A factor leading him to withdraw from a particular MOOC was that he "knew a lot of it anyway."

Some saw themselves as 'finishers' by nature:

Katie: "It doesn't fit with my perception of myself, to back out of a course."

Emily: "I tend to push on regardless."

Interviewees described being very committed people, with broad interests. A sense of freedom and control was motivating:

Peter: "It's not like you're paying for a course where it has a marked assessment."



Peter

works full-time in the engineering sector. Formally educated to secondary school level, he is aged between 46 and 55 years old

Laura: "The beauty of the course is that you can take it or leave it."

Being 'free', in the monetary sense, was also an important element of this choice, enabling people to take risks:

Ella: "I don't want to spend money, if it's not the right thing for me."

Ella's priority was finding the right course. Cost and flexibility combined to make the MOOC an obvious choice for her: "I'm at home looking after children ... so it's easy for me to do as and when I need, and it's free."

Free learning then, in all senses, was welcomed and embraced by those we spoke to, enabling experimentation with new topics, high levels of mental stimulation and risk-free participation. Their enthusiasm and excitement for learning characterises the next two themes.

Theme two: feeling part of something

Interviewees described different kinds of involvement in social learning activities, from none at all to multiple forms of communication, including attending face-to-face events. Discussion forums caused problems; their 'water cooler'-type unthreaded conversations meant interviewees saw their posts as being lost, rarely being responded to or followed up. Looking back over specific topics or responses therefore took time and perseverance. Impediments to following through conversations were off-putting.

Daniel: "I would have interacted more if it had been a better system."



Bill

works part-time in a public sector industry and is disabled. Educated formally to secondary school level, he is aged between 56 and 65 years old.

Online discussions were problematic for different reasons; for example, Bill simply preferred "to talk to people face to face." Ella had other reservations.

Ella: "There's a feeling of appearing foolish. That's what I thought. It's down in black and white. It's kind of, it's there and it's always there. You don't want to show yourself to be foolish in front of the other learners."

Simply reading and following posts was seen as a rewarding way of being involved:

Emily: "I was largely a lurker, learning but not participating."

For Emily, peers' contributions and knowledge affirmed a sense of being among a knowledgeable group: "That sense of other people like us, as opposed to the tutors who theoretically know more."

Box 2: Feeling part of a community

Several interviewees described an enjoyable sense of being in control of their learning while still being part of community.

Aled: *It was nice to have that sense of working at your own pace but being part of a community at the same time.*

Emily: *I'm getting a sense of being part of a community again.*

Rachel: *They expected you to get involved, just, 'come on, it's interesting, what do you think?'*

Katie: *... the interactive element, it's definitely something that's an attraction.*

Despite the 'massive' nature of courses, feelings of belonging and of being respected were expressed:

Rachel: *They treated you as an undergraduate, as someone who has got a brain.*

Bill: *You felt part of the course, very personal.*

Box 3: PhD students' blogs

Blogs – information or discussions published online – and contributions of the PhD student educators enhanced a sense of personal connection for Rachel: *They put their own things up, they had a group and they themselves would answer your questions.*

Exploring our Oceans MOOC blog: <http://moocs.southampton.ac.uk/oceans/>

What would an oceanographer be, without participating at least on one research cruise? That was my thought when I started my PhD in January 2013. As the samples for my project had already been collected before I started my studies at NOCS (National Oceanography Centre, Southampton), the prospects of going on board and explore the oceans were rather dim! Or so I thought. (Paris Stefanoudis, 5 March 2014).

A MOOC educator also saw this kind of activity as 'key to engagement': *Participants, unlike a lot of MOOCs, they really appreciated this direct contact: asking questions, [sharing] links, explanations.*

Despite the time differences and unthreaded nature of discussion forums, the global nature of the MOOC community was described as exciting and illuminating:

Laura: "I have really enjoyed the discussions ... in particular with people overseas."

Aled: "There are a whole load of people from all walks of life, from different communities, countries, perspectives."

Ella: "It is an amazing way to be able to engage with people from all over the world. Even if I was at university, I wouldn't have been able to ... I found that really enlightening."

Laura explained the importance of such discussions: "You had people from over on islands in the Pacific concerned about the mining of materials and to hear their point of view – you wouldn't necessarily hear about it in England – it gives you a much deeper understanding of the issues and problems."

"[Hearing] other people's concerns about how their governments are reacting to exploration ... and what it's like in other countries for people."

More generally, interviewees enjoyed conversations, and Jamal saw them as part of his learning: "If you talk to someone with more experience, your rights and wrongs can make them your rights ... I try to be more interactive, say asking questions, and giving answers."

Box 4: The generosity of fellow learners

A great deal of generosity and ingenuity on the part of fellow learners was described:

Emily: people do give a lot, some of the MOOC contributing on the forums is incredibly helpful, very detailed, wonderful links to all sorts of things, fantastic information and so as well as what's produced for the MOOC, its all the additional stuff that counts as well.

Peter: Some of the gems really were the materials that other people found.

Rachel: [An article] wasn't on the MOOC because it had only just arrived and other people had got it.

Ella: I wasn't always able to grasp the ideas, I think it was the pace. One of the other participants signalled to a You Tube video of somebody who basically explained it.

Peter: There's an awful lot to be gained from the assistance that people seem willing to help each other. There's always people who will struggle, have more difficulty grasping a concept, and of course if somebody else understands it ... they're willing to help them out.

Katie: People had been saying, 'I don't believe this, I don't believe that', I suggested, I tried to say 'oh well there is this other research, you could have a look at this', and put a name to the person or a link to the research.

Ella: I get a lot of value and gain from people sharing things and sharing things myself.

This was also commented on by a MOOC educator: What I did learn was the fact that students found bootleg copies of them and posted them anyway. So all the things we were not allowed to post were found and linked which I thought was very nice.

The Web worked as it should.

There were some drawbacks:

Katie: "You occasionally get people being pedantic or just sort of facetious."

Aled: "There had been several very opinionated people."

For some, discussions with family and friends were an important part of sharing:

Katie: "I've found one for my mum. She likes history."

Emily spoke of the loneliness of not having someone to discuss the new learning with: "It is quite lonely, and quite isolating. You read something and you get all excited about it and look around you and [the response is] 'oh yeah, don't keep telling me about this I'm not interested'."

Rachel took a keen interest in fellow learners' lives, clicking on names to read biographies:

Rachel: "you've got retired academics, retired doctors, and consultants, retired teachers as well as the youngsters."

Katie had anticipated that MOOCs would provide a new, select form of social media: "It's a kind of Facebook for intellectuals. You know it's going to be like that."

The involvement of academics was appreciated and expected. Their active involvement encouraged others to engage:

Rachel: “It was academics who were answering us all the time.”

Daniel: “... there’s been feedback [from academics], which is good, it’s what I would expect.”

Peter: “It was nice to know there were people there and they were actually reading what we were posting.”

Laura: “[academics are] so enthusiastic, you sort of feel as though you want to do it – for them.”

Box 5: The Google Hangout experience

Google Hangout – an instant messaging and video chat platform – was seen as an excellent opportunity to connect with international experts by MOOC educators. However interviewees felt differently:

Katie: It didn’t add [anything] at all for me so I didn’t bother with it.

Aled: I was too chicken, I was really very anxious that I wouldn’t be able to cope with the academics.

Jamal: It’s for more advanced learners, you can tell.

MOOC educators commented:

... people from around the world who course leaders had got to provide this discussion and it was a really interesting view of that probably wasn’t coming across in the main course content.

To beam in experts from across the globe in real time that they [learners] can engage with is massively useful.

The presence of a discussion forum, of mini-biographies and the ability to ‘follow’ peers (in similar ways to Facebook and Twitter) all emerged as pivotal in enabling a sense of community, offering windows into other people’s lives and worlds. For some this was energising and for others it offered a reassuring sense of being part of a cohort of learners, working separately but sharing experiences.

The next theme is linked to this sense of shared learning, but looks more closely at individual approaches to study.

Theme three: ways of learning

This theme was developed from the many discussions of how people approached learning. It includes time invested, organisation and pacing of learning, and how different formats and activities supported learning. The importance of the first activity was clear for Bill:

Bill: “First week and I thought, ‘that’s interesting’... the first video that was on there, I was hooked.”

Interviewees described spending at least the recommended two to three hours each week on the MOOC, although patterns and time spent interacting differed greatly:

Jamal: “Three hours a week was the optimum time I would spend.”

Daniel: “I tended to do it all in one hit really – I’d probably be at my machine for three to four hours.”

Not all managed such self-discipline:

Peter: “I found myself spending much more time than I had anticipated.”

Specific times of the week suited others:

Bill: "Tuesday nights, instead of going to the pub for a game of darts, I was staying in and watching that."

Completing everything at once contrasted with more flexible, opportunistic approaches:

Bill: "I work part time, during my lunch break, I was just dipping into it, having a look."

For Aled, finding a routine was part of the purpose of studying: "It was partly a way of imposing some academic discipline."

Jamal: "Sometimes I miss, but then I catch up the next week."

An organised approach meant it was easier to remember material and to keep up with the weekly nature of course activities:

Jamal: "I like to do it all in one go, because the tests [cover] about one week."

Peter: I definitely had a sense of wanting to keep up."

Schedules appear to invite a linear approach to learning, which appealed to learners who valued a clear progression:

Rachel: "That's the order it makes sense."

Katie: "The later stages refer back to the earlier stages."

Jamal: "I would read through the steps one by one and then if I don't understand I would go back again."

Bill: "I did everything in order. I'm very methodical like that."

Laura: "I'm the kind of person that thinks I might miss out if I don't read something."

Trust in the educators reinforced such an approach:

Ella: "I thought that the educators had thought through the information and, yeah that's the way in which it worked."

Bill: "It's laid out that way for you to follow it ... they've done it so you know, you follow it."

However Katie would have gone faster: "I didn't know that you could because they were whited out, it didn't occur to me to check – sometimes if I'd got it all done on a Saturday, I'd be sitting there on a Sunday thinking, I really want to do this."

The straightforward approach suited those who wanted to organise their week, keep up with activities and interact on weekly topics with others. For some it was part of remaining motivated:

Emily: "You didn't get behind and lost and [feel] that it wasn't worth doing the next week."

Laura: "It's preferable because if you want to have discussions with people it's better to have the discussion at the time rather than posting something days later."

This did not mean interviewees felt limited, or overly directed, in how to use resources however:

Daniel: “I wouldn’t necessarily look at every resource, but I’d certainly go through as it was laid out.”

Rachel: “... because of the resources they put up for you, you could expand and look further into what they’ve given you.”

Following the planned activities in the order prescribed enabled Rachel to surprise herself in how much she achieved: “... there’s loads of maths. But in the end you found you could do some of the maths.”

Box 6: Learners’ suggestions

Several interviewees offered ideas from MOOCs that that they had found helpful.

Ella: The PhD student put up some blogs, I really enjoyed looking at those, that was helpful.

Ella: On another course they did a video feedback [including] lots of the kind of questions [learners asked], like a You Tube thing, but sent around in an email and that was really helpful.

Aled: They had a question board at the end of each week and if we had a question, we could pin the question to that board and tutors would pick the three most relevant and answer them [or] reply to the individual.

Jamal: Maybe you can create a chatting system so as most people can go online and you can chat with people ... just be online and a message pops up.

Peter: I listen to lots of podcasts [driving].

Daniel and others suggested video transcripts become stand-alone resources, by including visual images and triggers from the video, thus reducing the need to watch videos simultaneously.

A good deal of trust – in academics, their research and educational approach – was apparent:

Bill: “It’s proof isn’t it ... I trusted [academic sources] implacably.”

Katie: “I would trust [academics/PhD students] more ... it’s got more authority.”

Laura: “I don’t think I ever questioned the validity of it at all.”

Peter was less trusting: “I question and analyse almost everything that’s presented to me.”

We asked interviewees what forms of learning materials or resources they found most helpful to their learning. Videos, reading transcripts and reading academic articles, and completing weekly quizzes were all discussed.

Aled said of the videos: “[they] were humorous, slick.” He described downloading pdfs, watching a lecture with pdf to hand, and making notes throughout to keep “as a permanent record.”

Others were not so sure:

Rachel: “I’m not keen on videos ... I read the transcripts.”

Daniel: “I tended to skip what I call talking head videos.”

Katie found the animated videos helpful in “showing connections”, enjoying “watching [videos] because it means I can do other things [at the same time].”

Emily and Daniel wanted to read transcripts instead of watching videos (see Box 6) but Emily discovered a need to “watch the video just to try to work out what they were referring to.” Daniel also commented that “the transcript ... didn’t include any of the diagrams”. Emily concluded “I would be happier probably reading text.”

However reading also elicited a mixed response. Ella “found [academic articles] quite challenging to read’ although Katie got ‘more academic stimulation from the readings.”

Confidence and skill in reading was important:

Peter: “I prefer reading, simply because I’m quite a good skim reader. Reading sinks in much more.”

Others preferred a mixture, with videos explaining and supporting more complex written work:

Laura: “I wouldn’t want something that was all video or that was all reading.”

Jamal: “Reading doesn’t make me fully understand, my mother taught me pictures and diagrams are good for that.”

Laura: “The topic lends itself to material which is all very different.”

Clarity was the important feature whatever the type of resource, especially as people would be working at odd hours and by themselves:

Bill: “Keep [it] clear and simple, just as it was advertised – it was ‘no experience necessary’ so this is basic.”

Daniel: “You can ask questions but it’s not a real-time thing.”

Weekly tests – or quizzes – suggested rote learning to Ella but helped Aled to check understanding:

Ella: “[They] were a little naff, because it’s ‘can I remember this fact, yes I can, no I can’t’ and it’s not about that.”

Aled: “As a means of [checking] whether you understood what’s been going on through the course in the week then it has value.”

To interviewees, the linear structure seemed overwhelmingly sensible and none seemed to perceive it as particularly restrictive. A mixture of learning approaches and resources was felt to be interesting, appropriate to topics and responsive to the wide variety of personal preferences and styles.

Theme four: a bit of proof?

Much has been written about badges, certificates and accreditation of MOOC learning, so we asked interviewees if they were interested in such forms of validation. Negative responses generally centred on cost and value to the individual, and the ‘meaningfulness’ or ‘worth accorded’ by others. Cost was mentioned by almost all, summarised by Aled who said: “I can’t afford them.”

Daniel might have considered it in the past: “when I was at work but now it’s not going to make the slightest bit of difference to me.”

Box 7: Incurring additional costs

The free nature of MOOCs has been discussed in terms of sustainability so we asked learners whether they considered paying for additional resources outside those offered within MOOC platform. The answer was overwhelmingly 'no'; the Internet was the major source of information outside the MOOC.

Daniel described encountering pay-walls when researching for research articles outside the platform:

Daniel: *It would be [in] articles in journals that you've got to have 'paid for' access.*

Books were discussed, with some reservations. Bill thought "a link to resources with a list of books" would be useful, but Laura echoed others' responses when she said "I can't imagine that I would want to buy a book."

Others questioned the worth of a certificate that says nothing about levels of participation or assessed work:

Laura: "A certificate of participation – how much participation?"

Emily: "People end up working out ... 'how little can I do in order to still achieve a certificate?'"

Ella: "I didn't have to do any assignments so I don't know if anybody would see any benefit to it."

However, academic accreditation would mean that Ella "definitely would". Peter had heard of "a sort of marked examination that you can pay for" but had no intention of taking up the opportunity.

A free online certificate was of value to Jamal: "sometimes there is a virtual certificate you can get for free."

One of our ten interviewees thought he would pay for the certificate.

Bill: "I've got to pay for my certificate at the end, [it's] a bit of proof."

Formal methods of accreditation did not emerge as either motivating or particularly valued by interviewees, possibly reflecting their previous educational attainments, ages and motives for undertaking MOOC learning.

Educators' reflections on findings

MOOC educators³ reflections offered insights into the learners' descriptions. The five people we spoke to were keenly aware of learners' diversity and had thought hard about it while developing their courses. They also spoke of the free nature of the MOOC and felt committed to the concept. Being part of a MOOC provided new opportunities: to experiment with online education, to engage the public more actively in programmes of research, to provide educational outreach and generate interest in emerging disciplines, and for one simply because, "you should give something back". They had all contributed to forum discussions, some blogged, and many were active on social media. Others had met learners at open events.

Discussions with educators were wide-ranging and it became clear that their pedagogic approaches were informed by broader objectives, which in turn influenced how curricula had been developed. Some had planned for a linear, step-by-step approach while others anticipated that 'dipping' in and out would be the norm.

³ The generic term 'educators' will be used to include all MOOC team members from this point although individuals may not identify with the term. Their academic roles generally include teaching, supervision, research, outreach and public engagement work, and programme development.

Different beliefs about the value and purpose of types of resource – particularly uses of video, transcripts and journal articles – influenced how each had used them. For example, for one educator, visual media offered a way of connecting people with a completely new environment; it was a way to “bring people face to face with the reality of the deep ocean” while interweaving important ideas. Another used it as an anchor for the forthcoming session and primarily to introduce foundational knowledge: “I try to make my videos more like a lecture.” This person had carefully constructed taught components and of those interviewees who had chosen to ‘skip’ the ‘talking head’ videos said simply: “I think they’re wrong.” A third was simply more sceptical about the likelihood of people taking the necessary time to concentrate adequately, and wanted more detailed feedback. These differences suggest that the work that particular videos are doing, in any particular MOOC, might usefully be made explicit.

Educators were impressed, again like many interviewees, with the ingenuity of those who sought new and interesting resources (see Box 5). Interactions were also found to be rewarding; learners thanked each other for insights and generated “exactly the kind of discussion we wanted to see.”

Despite the unthreaded conversations, forum discussions were found to be integral to peer learning: “it was much richer than you get from the lecture.” Holding back from replying to questions too soon was a technique discussed by several, as “very often they will correct each other.” Educators commented on how surprised and pleased they were to see “high levels” of discussion, developing quickly and well. One described coming to appreciate creative confusion: “it’s nicer to see someone not understanding and asking questions.”

Being able to see the precise points at which learners struggled with an idea highlighted thresholds common to many (see Meyer and Land 2003): “you get an insight into what they’re failing to understand.” Equally, witnessing how particular interventions helped peers to work through and grasp new concepts was illuminating. Yet while this was seen as exciting, frustration and concerns were also shared. Two detailed examples were given when difficult intellectual challenges required more work than many learners seemed prepared to give. While educators were pleased to see learners’ delight at grasping difficult new ideas, they were equally conscious of those who complained, often vociferously. This could be chastening: “you can take it quite personally.”

Another described how a nuanced argument against a particular stance was misunderstood by many learners, being “taken on face value” as support for the position. This created doubts about whether more interesting or controversial ideas that need to be debated and worked through – even within a lecture theatre or classroom – are suited to MOOCs. In a similar vein, others questioned how well MOOCs provoke and support deep learning, although the difficulty of knowing this in a full lecture theatre or large traditional course was recognised.

Others spoke of the risks associated with exposure to such large numbers of people. A ‘troll’ created problems on one course requiring guidance to the team and intervention by FutureLearn. In another instance, an educator replied to what he considered to be a politically loaded, and potentially offensive, comment by providing in-depth evidence to counter the view, only to have the view expressed even more strongly in response. He concluded “in a lecture you can close it down whereas online you can’t.”⁴

Reliance on ‘regular contributors’ to forum discussions and low numbers participating was often a disappointment. The idea of a ‘global’ classroom was thought to be more like “time diverse classrooms”, in contrast with interviewees’ experiences. One educator was particularly puzzled, and saddened, that the “vast majority” did not interact at all, and seemed uninterested in social media. The Google Hangout had been an opportunity to “beam in experts from across the world in real time” yet this had yielded relatively low interest.

⁴ We recently discovered FutureLearn support course teams and learners by removing particular comments that cause offence although those posting can appeal against such decisions.

Like interviewees, educators had struggled with the multiple choice or 'quiz' format and one commented that the "testing the superficial recollection of facts" was at odds with deep learning. They "took hours" to create, precisely because such an approach was not their normal practice. They were committed to MOOCs as free and unconditional access to learning. On the question of payments for certificates of participation, there was consensus that unless providing academic accreditation or a "strong qualification", there should be no charges. Several had gone to great lengths to source freely accessible papers and links. MOOCs were not seen as a unique experiment, not a "substitute for existing formal education."

Discussion

This small qualitative study asked the following two questions: ‘How do MOOC learners describe their experiences of learning?’ and ‘What can MOOC designers and educators learn from their accounts?’

Overall, the ten interviewees, some with extensive experience of online learning, described generally very positive experiences of ‘free’ learning through a MOOC. They outlined very different life experiences and motivations for study, reflected in their different learning styles, approaches and preferences. Being part of a (very) large cohort was seen as interesting, and interviewees saw benefits in learning with and from others. Trust in educational materials and processes was generally high, and for many the role of the ‘teacher’ was important. Nonetheless, some detailed advice for improvement was offered to MOOC. Multiple-choice tests, certificates and academic accreditation were not universally popular, and MOOCs played a part in work and education plans only for a minority. Intellectual stimulation, the discipline of studying, and being part of a global online community of learners, were found to be important and highly valued.

Specific suggestions and recommendations for improving the MOOC learning experience are made later in the report, but first of all the importance of social and intellectual engagement is explored and compared with literature.

Ways of supporting forms of social and intellectual engagement in a MOOC – four quadrants

Interviewees’ behaviours and goals differed across MOOCs, suggesting two spectrums of participation. Some clearly state their learning is for personal enjoyment and stimulation, some have instrumental reasons, such as work goals, while others move along the spectrum as their lives and goals change or according to different MOOCs. They also describe very different degrees of social engagement in different MOOCs, from highly interactive to a fairly passive observational form although, again, movement and change is the norm. Importantly, interviewees seem not to pigeonhole themselves in these regards, but describe different learning and personal encounters eliciting different responses.

How important such social and intellectual involvement is in a MOOC is worthy of greater investigation. Previous work shows that for some, participation is seen as synonymous with and integral to learning (Hrastinski 2008). However Moore (1989) differentiates between learner–content interaction, learner–instructor interaction, and learner–learner interaction, promoting all three as essential for successful online learning. Course design has been found to be pivotal to promoting the different types of interaction, and in turn deep learning and application (Garrison and Cleveland-Innes 2005; Ke 2009). For Zimmerman (2012), online interaction with content is especially important. It is with these messages in mind that we offer ways of designing for involvement, by considering how structure and learning activities promote personal change and elicit helpful learning behaviours.

Figure one demonstrates how four quadrants exist between these spectrums, each offering MOOC developers ways of generating movement towards forms of engagement, and reinforcing positive behaviours (of the kind identified above). For example:

1. People who generally study alone might be encouraged to be more interactive with peers, within and outside the MOOC (moving from left [a] to right [b]).
2. Social learners might benefit from sign-posting when more difficult ideas need greater independent study, or greater interaction with content (right [b] to left [a]).
3. Greater personal enjoyment and stimulation might be achieved by researching subjects in depth or selecting own topics of study, developing self-reliance and engagement with self-directed content (moving from bottom [d] to top [c]).
4. Greater application of learning might be encouraged through suggested activities within the MOOC (such as the Google Hangout) and outside of the MOOC and shared with others, such as work

communities or other networks, to encourage interaction with peers outside of the MOOC platform (moving from top [c] to bottom [d]).

While there is not a single 'right' place to be on the quadrant – as needs and priorities will differ and change – research suggests some interaction, ideally across Moore's (1989) 'three types', is essential. Interaction with content is, however, to be promoted every bit as strongly as social, peer-to-peer interaction. Educators' interventions, or steering of discussions, along with skilled course design, can be seen to be key to such interactions with content. Encouraging people to move along from left to right across the horizontal spectrum, even marginally, might include such things as: generic and specific guidance on using discussion forums, information about how and where the post will appear, spell checker, and control over deleting own posts. Helpful learning for those already interacting may include guidance on responding to unhelpful or offensive online behaviours and even learner-generated codes of behaviour for particular MOOC communities.

Specific activities that require application or interaction outside the MOOC, such as working out how to use a dataset, might encourage movement from top to bottom along the vertical spectrum. Activities that offer open-ended forms of discovery, reading for pleasure or offer links to tangential topics may encourage movement from the bottom towards the top. Again both are necessary to interact with content in meaningful and deep ways.

Figure 1: Four quadrants approach to guiding and supporting forms of engaged learning.

<p>In this MOOC you may be:</p>	<p>... interested in learning primarily for stimulation and enjoyment.</p> <p style="text-align: center;">[c: personal enjoyment]</p>		
<p>... interested in learning for educational or work enhancement or other specific objectives</p>	<p>You may alternate between:</p>	<p>... learning independently, researching own interests, without active social engagement with MOOC peers. You may enjoy reading their posts and following links</p>	<p>... learning actively with peers, generating social involvement and contributing actively, posting, offering resources</p>
	<p>... learning for personal enjoyment and intellectual stimulation</p>	<p>Guidance specific to MOOC might be offered that encourages interaction and application to areas of personal interest</p> <p>It might suggest appropriate kinds of activities to support those new to or anxious about social learning with guidance and advice</p> <p>It could usefully suggest ways of applying learning</p>	<p>Guidance specific to MOOC that supports and encourages creative/experimental and inclusive forms of interaction. Might include learning/sharing ways to initiate social events online or participation in international online events</p> <p>Encouragement of responsible/professional online behaviours</p> <p>It might signpost when 'sticking with'/independent study needed</p> <p>It might suggest ways of applying learning</p>
	<p>... learning for the achievement of specific work/educational/CPD/other specific objectives</p>	<p>[a: studying alone]</p> <p>Guidance specific to MOOC that encourages interaction and application of learning, possibly within work and education settings and networks, within and outwith MOOC community</p> <p>Might usefully be supported by advice and guidance on professional use of social media</p> <p>It might suggest both application of learning and independent research on topics of personal interest, to encourage deep learning through reflection</p>	<p>[b: social learning]</p> <p>Guidance specific to MOOC that supports and encourages creative / experimental and inclusive forms of interaction</p> <p>Might include initiating professional network social events online or sharing specialist kinds of knowledge within and outwith MOOC community</p> <p>Personal enjoyment and stimulation might be supported by encouraging personal research and selection of topics</p> <p>Signposting of topics requiring greater independent study to promote 'sticking with', deep learning and reflection</p> <p>[d: learning for work/education]</p>

Summary and Conclusion

The learners interviewed had very much enjoyed their MOOC experience, saw fellow learners and MOOC education teams as pivotal to their success, and particularly valued the unconditional and free nature of their learning. Their motives were primarily for intellectual stimulation and personal development, so unsurprisingly few anticipated seeking assessment or accreditation for their learning. To promote greater involvement and interaction – with the content and with education teams as well as with fellow learners – we offer a ‘four quadrant’ framework to support course design and the promotion of greater engagement within the MOOC.

MOOC-specific guidance might include making explicit how to use particular resources, such as videos, or how to structure a debate among peers. Approximate guidance on how long more complex activities require, if deeper learning and integration is to take place, might militate against a sense of simply having to ‘complete tasks’. Such specific guidance, integrated into the MOOC, might usefully sit alongside generic guidance such as that suggested by Morris and Lambe (2014). Together, such different types of guidance should promote more sustainable forms of engagement and persistence. This is important because learning alone, whether online or in traditional settings, can be isolating. Learners’ perspectives have made more visible the links between peer learning, social interaction and sharing of resources.

Educators’ experiences reveal how *large numbers* of online learners provide a new and unique view of the learning process; it enables them to better understand thresholds and learners’ various ways of passing through them. The social aspects of a MOOC are closely linked to learning, even for those only ‘observing’ others’ contributions and debates. The silent majority seems to benefit from, even depend upon, a much more active minority. However, the comment that MOOCs are a known to be a kind of ‘Facebook for intellectuals’ sounds a warning bell for those interested in inclusivity, widening access and attracting greater student diversity into education more generally.

There is agreement that financial outlay – whether for additional resources, certificates, exams, or for online education more generally – is unwelcome and seen to fly in the face of the spirit of the MOOC. Interviewees’ comments serve as a reminder that although many MOOC learners are older and well educated, they are not insensitive to cost and may well be unable to afford alternatives. The comment of a provider of traditional online courses that cost hundreds of pounds each – “you get what you pay for” (The University of Oxford Department for Continuing Education, 2014) – would seem to miss the point made by our interviewees, who are enjoying MOOCs specifically *because* they are cost free (Box 7).

MOOCs appear then *not* to be a poorer quality version of similar online courses, in the view of our ‘completer’ interviewees, but as something new, exciting and completely unique in their educational experiences. Somewhat paradoxically, at least if widening access and sustainability are higher education’s goals, it is the very cost-free, assessment-free, unconditional, massive and accessible features of MOOCs that emerge as central to their success. This brings with it new opportunities, and new responsibilities for advice and guidance that promotes engaged forms of learning.

Rather than offer a set of recommendations resulting from this small-scale piece of research, it seemed more appropriate to draw out particular points that would be likely to impact our own practice as planners, designers and developers on future occasions: the points we have taken as ‘recommendations’ for *our* practice.

First, we aim to ensure that learners continue to be provided with content in as wide a range of formats as possible in order to cater for the diversity of learners – including disabled learners – that study MOOCs. This diversity seems to be far greater than is the case with many traditional online and distance learning courses, not least because of the large number of nationalities who enrol on MOOCs with their respective different educational backgrounds. It is challenging to provide a high-quality learning experience that meets these needs and expectations, and although we recognise that we cannot please all the people all of the time – and indeed, that student satisfaction is not necessarily a helpful tool when gauging the effectiveness of pedagogy and the quality of learning – the evidence suggests that variety is one of the keys. This fits well with our (legal as well

as moral) commitment to facilitate a positive learning experience for all learners, including those with disabilities, and to provide an inclusive experience for all participants to work together.

Second, we have taken note of the supportive role that clear guidance to learners plays in ensuring their study of a MOOC is positive. Information about what is expected of them, how long an activity is likely to take, whether their learning develops incrementally or instead offers discrete blocks of learning, and how the MOOC is structured, all contribute to facilitating the learning experience and to managing learners' expectations. These subtle indicators need to be carefully thought through so that they are easily visible but do not dominate either visually or by requiring excessive reading. Similar guidance in the form of signposting more difficult exercises or contested theoretical ideas that require greater critical analysis we plan to do routinely, enabling effective time management for independent study and reflection.

Designers have a real role to play in MOOCs, as they do in all online learning. We have realised afresh the importance of designers and educators collaborating together in order to develop the skills of differentiating between a poorly constructed session and a genuinely difficult task that needs greater application, especially when responding to learner feedback. Another area requiring close collaboration is between designers and academic librarians about issues such as guidance and negotiation for copyright and licensing of resources for MOOCs; support for MOOC design; and support for information and digital literacies for educators and learners on MOOCs.

Academic librarians also have expertise in helping learners to access resources and it is important to develop even closer collaborative relationships between MOOC designers and subject librarians both during the design and planning stage and while the MOOC is running. This works to the advantage of everyone: learners benefit as a result of gaining quick and efficient access to a wide range of resources; designers understand and are better able to build into MOOC designs the key features of accessing resources; and librarians gain insights into what problems MOOC learners experience, which are the most and least popular resources, and how both learners and designers can be supported.

MOOCs are a social way to study, even if virtually. Platforms such as FutureLearn encourage social engagement and interaction, and learners clearly appreciate the opportunities afforded and the general social experience. Our ongoing focus will be to build on the expertise we have already gained and to seek to develop opportunities by ensuring learners are able to seek advice quickly and easily, by creating a sense of welcome and being available to give, or point to, relevant information. At the same time, again emphasising good online practice beyond MOOCs, 'netiquette' in the form of using inclusive language, demonstrating respect for alternative viewpoints and all the other forms of acceptable social interaction, needs to be endorsed through specific guidance and exemplary practice.

We continue to be a team of researchers into our practice as online educators and hope to look in further depth into what the 'global classroom' actually means in practice. Attention needs to be directed at discovering how improved forum design and creative forms of communication can facilitate international discussion and collaboration across time zones.

The final word goes to learners, since our project highlighted a number of ways in which they too can enhance their experience. The evidence suggests that learners should be prepared to get involved in discussion forums, using them as an opportunity to experiment and learn, not just about the subject matter, but also about the technologies that support learning. This can build confidence by reading others' posts and responding, having conversations, posting occasional questions, getting involved at most popular times to take advantage of quick responses to posts. Good levels of involvement are also shown to increase learners' enjoyment.

Being proactive in giving feedback to the MOOC tutorial team, and in asking questions directly of tutors and leaders, particularly if something seems unclear, can lead to greater support and clarification of what is expected, which in turn enhances the learning experience.

Learners with a specific goal need to develop ways of pacing themselves and to focus on one MOOC at a time in order to engage with their learning in depth and do any associated extra research and reading. At the same time, looking for opportunities to apply their new learning, either through conversations and debates with peers in a forum, or elsewhere outside the MOOC environment (e.g. professional networks, social networks, at work) will go a long way to addressing potential feelings of isolation.

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Appendix I: Learner Interview Schedule

Learner Interview Schedule

Expectations
Why did you do the MOOC?
Did you get what you wanted from the MOOC?
Have you done distance learning before?
Was the MOOC what you expected?
Was the MOOC what you thought
Experiences
In an average week, would you set time aside to do it or as and when?
Did you look at all the resources, the links, the articles that the MOOC suggested, in a typical week?
Would you call yourself a learner, or a student or something else?
Thinking about the resources that you used during the MOOC? Did you look at books, links, read the articles?
Would you go through each activity step by step?
Is the MOOC layout helpful for people that want to do the activities step by step?
Did your focus change because of the links that you were looking through?
There is discussion about face-to-face meetings between MOOC learners, is that something you would like?
Did you like the discussion board and the opportunity to interact?
Would do in general when looking on the Internet, click through from one article to another in general?
How much did using the resources given on the MOOC and others you found, contribute to your experience of the MOOC?
Resources
Thinking about the articles on the MOOC, did you question the source of the link you were going to?
Were there any books or articles that you came across that you think should have been highlighted on the MOOC?
Was there a particular aspect that made you feel really engaged?
Was there a particular activity or resource that stood out for you, that you remember now?
Which resources are easier for you to use?
Which do you remember/learn more from?
Social media
Social media – What did you use? Was this helpful? For what?
Did you do anything else on social networks? Google Hangout, Facebook etc.?
Did you ask questions/interact on social networks?
Reflections
Was it challenging enough?
Did you get what you wanted from the MOOC?
Are you thinking about doing any more MOOCs?
Are you interested in the statement/certificate of participation/completion?
Anything else?

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