

Liminal Participants and Skilled Orienteers: Learner Participation in a MOOC for New Lecturers

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Abstract

This case study explored learner participation in First Steps in Learning and Teaching in Higher Education (FSLT12), a short massive open online course (MOOC) aimed at introducing learning and teaching in higher education that was offered by Oxford Brookes University in June 2012. Both novice and experienced MOOC learners joined the course. The aim of the case study was to explore triggers for active participation. A mixed-methods approach was utilized in order to collect and analyze data from focus groups, individual interviews, participant blog posts, and a survey. The lenses of social constructivism, connectivism, and community of practice theories were used to enhance understanding of participation in FSLT12. Three main themes emerged: (1) Navigation: New participants felt overwhelmed by technical issues, multiple channels, and a perceived need to multitask, while experienced learners were judicious about planning their route; (2) Transformative learning: Ultimately, learners experienced a transformative shift, but it required reflection on practice, community support, and self-organization; (3) Reciprocal Relationships: New learners needed time to determine their audience and core community, as well as to realize mutual relationships within that community. Learners in a MOOC inhabit a liminal space. Active MOOC participants are skilled orienteers. Engaging local expertise of experienced MOOC learners and developing participatory skills in new learners is a key strategy for those who organize and facilitate MOOCs.

Keywords: massive open online course (MOOC), connectivist massive open online course (cMOOC), threshold concepts, navigation, liminality, transformative learning, participation, reciprocity

Introduction and Background

This case study explores the learner experience of participation in *First Steps in Learning and Teaching in Higher Education (FSLT12)*, which was offered by [Oxford Brookes University](#) over a five-week period during May and June 2012 for new lecturers in higher education and was one of the very first massive open online courses (MOOCs) to be run in the United Kingdom. FSLT12, which was funded by the [Joint Information Systems Committee \(JISC\)](#) and [The Higher Education Academy \(HEA\)](#) program on open educational resources, was modest in MOOC terms in that it attracted 206 participants. Nevertheless, this case study demonstrates some important issues about the experience of MOOC participation from the perspective of the learner, which may determine active participation.

Other researchers ([Chamberlin & Parish, 2011](#); [Cormier, 2010a, 2010b](#); [McAuley, Stewart, Siemens, & Cormier, 2010](#); [Weller, 2011](#)) have identified potential advantages of MOOC participation, for example opportunities to build personal networks and make connections beyond the content of a course. In spite of these espoused benefits, it has been acknowledged that participation in a MOOC may be challenging and troublesome:

Participation in a MOOC is emergent, fragmented, diffuse, and diverse. It can be frustrating. It's not unlike life. (Bonnie Stewart, in her narrative introduction in [McAuley et al., 2010](#), p. 5)

Evaluation of FSLT12

An evaluation strategy for FSLT12 was integrated with the course design. An identified goal was to gain more knowledge about the experiences of a diverse group of participants, their interaction with content and with one another during FSLT12.

The research and evaluation approach was initially identified as a general topic to understand more about differential participation within FSLT12. Refinement of specific research questions followed feedback from the project critical friend (who was assigned by JISC/HEA) and were as follows:

- 1) What was the learner experience of participation in FSLT12?
- 2) How did learners interact with content in FSLT12?
- 3) How did learners interact with each other in FSLT12?

Bonnie Stewart (in her narrative introduction in [McAuley et al., 2010](#)) identifies a range of inhibiting factors for participation within a MOOC. These include not appealing to those most comfortable in a formal educational environment, lack of accreditation, lack of familiarity with the digital skills required, lack of access to the tools required for participation, lack of scaffolding and support, language barriers, lack of netiquette, technology ownership and bandwidth, time zones, volume of information, mastering content, and reading blog and discussion posts.

George Siemens (in his narrative introduction in [McAuley et al., 2010](#)) suggests that knowledge of how participants engage or interact with content and each other is a little-known territory. The nature of an open learning platform, which relies on connections between learners in order to autonomously aggregate, remix, repurpose, and feed forward, poses many questions about the fostering of active participation ([Kop, Fournier & Mak, 2011](#)). Aggregation, remixing, repurposing, and feeding forward were explained by Stephen Downes in his introduction to the *Change11* MOOC (see [Downes, 2011](#)). Aggregation refers to selecting the content of a MOOC that is most relevant to the individual participant, remixing refers to keeping a personal record of everything the individual has accessed within a MOOC, repurposing consists of the individual participant creating some content of their own, and feed forward involves sharing that with others.

There is a need for more evidence to guide the implementation of MOOCs and for more evaluations of the educational benefits ([Bujack, Paul, & Sandulli, 2012](#)). This case study aims to add to a growing body of knowledge in this domain. The intended audience is higher education lecturers, educational developers, and related support staff, in addition to the international community who have a pedagogical and research interest in MOOCs.

MOOC Principles and FSLT12 Design

A MOOC differs from a formal online course in that it is open and distributed within Internet social spaces. The term "MOOC" was coined in 2008 by Dave Cormier as a description of the phenomenon of George Siemens and Stephen Downes' open online course at [Athabasca University](#), called *Connectivism and*

[Connected Knowledge 2011 \(CCK11\)](#), which attracted over 2,300 participants ("[Massive Open Online Course](#)," 2012).

The underlying philosophy was a notion of connectedness, which is underpinned by creating and maintaining a personal network of connections and interacting with and creating content. Importantly, individuals choose at what level they might participate. There are four underlying principles, namely *autonomy*, *diversity*, *openness*, and *interactivity* (Downes, 2009). The design of FLST12 attempted to reflect these principles. The course design team consisted of a senior educational developer who leads a Postgraduate Certificate in Teaching and Learning in Higher Education, an experienced lecturer in nursing who was seconded to the team, a learning technologist, and an independent education consultant who was an experienced MOOC participant and facilitator. A common thread that was shared within the team was considerable prior experience as distance learning online tutors who were motivated to learn about how a connectivist approach to course design might inform their ongoing online teaching practices.

The FSLT12 curriculum was based on a short non-accredited three-day, on-campus course offered by Oxford Brookes University as an introduction to teaching and learning in higher education and is underpinned by the *U.K. Professional Standards Framework for Teaching and Supporting Learning in Higher Education* (HEA, 2011). FSLT12 ran for a period of six weeks and each week featured a specific theme from the *First Steps* curriculum: supporting learning, reflective practice, teaching groups, feedback, lecturing, and evaluation.

FSLT12 was free of charge for all participants; 20 free assessed places were offered on a first-come, first-served basis. Assessment, which was non-accredited, consisted of a reflective statement, participation within an annotated collaborative bibliography activity, and preparation and showcasing of a 10-minute microteaching activity during the final synchronous sessions. Participants who completed the assessment were awarded a certificate of attendance. The delivery of FSLT12 was considered to be a pilot for a potential accredited postgraduate module, which will continue to run in the future as a MOOC.

Openness

A unique intention of running FSLT12 as a MOOC was to introduce the concept of open academic practice to the target audience by offering a traditional course within an open online platform. All of the course material and interaction was openly available on the public web (with the exception of a discussion forum set up for assessed participants). The learning platform consisted of an open [WordPress site](#) and an open [Moodle virtual learning environment](#) for prepared resources and discussion forums. Five synchronous audiographic sessions were offered within a [Blackboard Collaborate environment](#), featuring an introduction to the course from the facilitators as well as three sessions, which were led by guest speakers: Etienne and Beverly Wenger-Trayner, Frances Bell, and Dave White. Directions to the synchronous classroom were posted on the open WordPress site, which served as an entrance portal to the course. This meant that formal enrollment was not necessary to attend those sessions, to view the recordings afterwards, to access any of the learning materials or read the discussion forums. The only form of course participation that required registration was posting on the discussion forums.

Autonomy

Openness offered participants a wide variety of ways to engage with the course and freedom to set their own patterns of participation. Casting the course as a MOOC explicitly gave participants permission to engage in the ways and quantities they wished, with no requirement to be involved in all aspects of the course. Participants were also empowered to choose their own pathways through the available material, dipping in for particular topics or materials, skipping others, and, as the course materials all remain available, to engage with materials at the time and in the order of their choosing. This autonomy operated on several different levels and means that it is impossible to trace all of the shades of course engagement and quantify how much each was used. Different amounts of participation were possible from reading a single tweet, up to extensive activity in all discussion forums and live sessions, and at all levels in between. The preferences and interests of each individual participant or observer mean that engagement with the course will look different for each person.

There was anticipation that many of the target audience (new lecturers) might be MOOC neophytes, so scaffolding strategies to enable interactions with earlier adopters was an important course design consideration. A range of relevant open educational resources (OER) was therefore developed or

harvested prior to the start of FSLT12, and integrated into the WordPress site under the heading "[Tutorials](#)," with the specific purpose of presenting guides to acquiring participatory skills.

Diversity

FSLT12 was targeted at new lecturers, Ph.D. students who teach, and people moving into higher education from other sectors. The team anticipated diversity within this group. A significant proportion of the course participants did fit those categories. There were people who were completely new to higher education and to learning online, but who had chosen the course because it was more convenient than its face-to-face equivalent. Others were experienced MOOC participants, and experienced lecturers, interested in refreshing their practice, or sharing their expertise.

There were 206 official registrants for FSLT12, which may be considered small in MOOC terms but given that FSLT12 had a specific course topic and was delivered during a year where many other MOOCs were offered this may not be surprising. [Downes \(2013a\)](#) suggests that a concept of massive may not necessarily be conceived as engaging many numbers of people," but in the design elements that make educating many people possible."

FSLT12 attracted higher numbers than the face-to-face equivalent (where numbers average 20 to 30) and participants were more geographically diverse, from 24 different countries including Australia, Canada, India, and South Africa, as well as many European countries and the United States. [Downes \(2013a\)](#) makes the point that when a course is massive in its design elements, it should not create bottlenecks. This means that it should not rely on the teacher to give feedback to the learner but enable many one-to-one interactions so that feedback may come from a range of sources.

An additional pedagogical approach to the MOOC has emerged, which is based on a different perspective that focuses on a single open platform, instruction, learning outcomes, self-directed learning, and course content. [Udacity](#), which was founded by Sebastian Thrun in 2011, is an example of this. This phenomenon has conflated the understanding of MOOCs; the emphasis on "the massive" within these courses is scale of numbers, sometimes in excess of 150,000 participants. These are referred to as xMOOCs, whereas connectivist-influenced MOOCs are known as cMOOCs ([Sloep, 2012](#)).

Interactivity/Connectedness

Support for interaction was provided through the aggregation of blogs in the WordPress site, through centralized discussion forums in Moodle and through a suggested [Twitter](#) hashtag ([#fslt](#)), which was used extensively. These support mechanisms allowed users to easily follow conversations about the course and to connect to others discussing similar issues, without the need to otherwise engage with the course. In addition, participants were encouraged to interact and connect in locations of their own choosing, resulting, for example in a small group of participants meeting face-to-face.

Reflecting on a Review of the Literature

A review of the current literature has highlighted that there is limited emergent evidence on how participants interact with content and each other within a MOOC. Apparent themes are: multitasking, benefits and risks of openness, digital identity, and communities of practice.

Multitasking is a required skill for active participation. [Levy's \(2010\)](#) account of personal experience as a new MOOC learner in *Personal Learning Environments Networks and Knowledge* (PLENK 2010) suggested that it was very complex to organize a personal learning network, and considered that time management skills were a key factor to overcome this; in addition, a significant level of personal motivation was required in order to sustain participation. A lot of the learning happened in back channels, but it required multitasking to in order to achieve this. MOOC organizers can facilitate some of this by providing daily newsletters or summaries of participant activity.

There are *benefits and risks associated with openness*; the fact that access is enabled for a diverse range of participants means that the less experienced can benefit from expertise beyond the realms of a normal course (Kikkas, Lannpere, & Põldoja, 2011). MOOCs have been described as a model of "digital practice" as they can develop the skills of individuals so that they can participate within a digital economy ([McAuley et al., 2010](#)). [Weller \(2011\)](#) suggests that access to participation in education may be widened by MOOCs, as there are fewer prerequisites than in formal education. Risks include the need for prerequisite critical literacies such as the ability to learn autonomously and maintain a level of presence within a MOOC ([Kop et al., 2011](#)). Participation in a MOOC represents engagement in norms of digital

interactions, which may present a good learning opportunity but can be challenging for those new to these expectations (McAuley et al., 2010). The size of a MOOC cohort can be overwhelming and it can be challenging for the learner to make sense of many voices (Chamberlin & Parish, 2011). The learner is provided with more global connections than a traditional course, exposure to diverse views, and an abundance of resources and sharing of experiential knowledge, but is more likely to participate if there is potential for credit (Chamberlin & Parish, 2011).

Participation can be either enhanced or inhibited by learner *digital identity* – for example, the difference between having a confident voice within digital worlds compared to feeling that you have nothing worthwhile to contribute, and the role of participant as knowledge builder may feel alien to some learners (McAuley et al., 2010).

The work of Hrastinski (2008, 2009) suggests that there are varying perspectives on how participation within online *communities of practice* can be conceptualized. This includes levels of participation from accessing the online environment to taking part and joining in a dialogue, the perspective of learners, and quantitative measures such as numbers of postings, lengths of postings, and time spent reading postings. Hrastinski makes the point that online learning participation is a complex and evolving process for the learner, which involves taking part and building relations with others and involves a number of activities and feelings such as thinking, feeling, belonging, and communicating; counting numbers alone is an insufficient measure of participation. Lurking is seen as a legitimate level of participation and an activity that shows potential for more active participation. This is an important consideration for exploration of participation in a MOOC and, in particular, the identification of triggers or processes that transform lurking to active participation.

Theoretical Frameworks

Although cMOOCs are considered by some to be underpinned by connectivist principles (Cormier, 2010a, 2010b) it would appear that the development of MOOCs has been influenced by a combination of theoretical perspectives (Bujack et al., 2012; Kop, 2011; Levy, 2010) such as constructivism, connectivism, and the concept of communities of practice. Hrastinski (2008) suggests that research frameworks for high-level conceptions of online learner participation include a variety of options and identifies constructivism and communities of practice as appropriate frameworks. Sfard (1998) argues that within educational research there can be a case for consideration of more than one theory for learning because each perspective can offer exclusive benefits. The rationale for this is argued within this case study, which was informed by constructivism, connectivism, and communities of practice.

Constructivism

The concept of social constructivism has been influenced by Vygotsky's (1978) social learning theory, which placed prominence on collaborative learning. The learner constructs and interprets knowledge actively, and practice, prior knowledge, and experience are viewed as an important platform for ongoing learning. The design of the environment is constructed around authentic and experiential tasks such as those designed into the curriculum of FSLT12. Within a study exploring learner experience of participation in a MOOC, constructivism acknowledges the diversity of participants and aligns with the emphasis on creating and interpreting knowledge within a MOOC. In terms of interaction with content within a MOOC, constructivism embraces the purposes of learner activities such as aggregation, mixing, repurposing, and feeding forward, and includes social interaction with other participants in order to collaborate within learning activities. Constructivism, on the other hand, may not align with the role of a MOOC facilitator who is less prominent than in a normal course, as the emphasis in a MOOC is on autonomous and peer learning. The potential number of participants within a MOOC may also limit a role for a central facilitator.

Connectivism

Connectivism as a learning theory (Downes, 2012; Siemens, 2005) is based on the premise that learning theories should reflect current social environments and, in particular, the influence of technology and the diverse informal settings in which modern learning takes place. Siemens (2005) critiques constructivism on the basis of the emphasis of knowledge, seen as resting with the individual; the use of technology has altered this premise as knowledge is viewed as residing within systems. Connectivism puts an emphasis on lifelong learning and also integrates chaos and complexity as important concepts, to prepare learners for working in a more unpredictable world and support the development of relevant skills in self-organization and decision making. The theory is that learners will create their own personal networks by making connections with people and ideas across a distributed digitally networked world. Learners will

also be enabled to identify their own connections to support their ongoing learning. The pursuit of current and up-to-date knowledge is a desirable outcome. [Bell \(2011\)](#) has critiqued connectivism as an incomplete learning theory in that it may be insufficient to explain what has worked well in practice. However, the theory may be helpful in exploring how participants interact with content and each other in a MOOC, especially if the topic relates to continuing professional development (CPD) such as in FSLT12.

Communities of Practice

Wenger (1998) has presented key ideas about what it means to participate within a community of practice. He suggests that it is a complex, active process of participation and mutual recognition. Within any given community of practice this will lead to personal identity building. Participation within a community of practice leads to a perspective on the knowledge, which is considered to be valuable and effective for that community. [Hrastinski \(2008\)](#) has identified that community of practice theory conceptualizes the complexity of participation and the association of participation with learning.

[Wenger, Trayner, and de Laat \(2011\)](#) differentiate between a community and a network and do not necessarily view participation as collaboration because participation can include all types of relations – for example, conflict and competition. The theory also takes into account legitimate peripheral participation and the idea that new learners within a community of practice may be viewed as apprentices and take on more active roles as they are drawn into the community.

A community of practice is seen as a learning partnership among people who find it useful to learn from and with each other about a particular domain, whereas a network is seen as a group of relations, personal influences, and connections between individuals. This is a useful lens to consider how participants have interacted with each other in a MOOC where many networks may be evident: What is the relationship between community and network, and which ones are the most significant for which participants? It is also a useful lens for exploring learner participation within a MOOC and self-evaluation of participation, as well as to identify strategies that may encourage active participation. Wenger (1998) never intended communities of practice to be a standalone theory. In this case study, community of practice theory is used to complement the theories of constructivism and connectivism as an overall theoretical framework.

Methods

The methodology was a case study that employed a mixed methods approach. Bryman (2012) describes trends in social research and in particular the expansion of mixed methods research as a strategy to provide a more complete picture of a phenomenon. A MOOC has potential to offer researchers useful and comprehensive data and in particular digitally archived records of participant activity and interactions. A quantitative analysis of these was used to illustrate trends in participation, which were explored in more depth with a course evaluation questionnaire, followed up with focus groups, individual interviews, and a survey of participatory experience. The aim was to provide rigor within the case study by what Bryman describes as completeness in addressing the specific research questions, and to provide triangulation of the data, which helps to identify important connections to provide a detailed account of what counts as participation within a MOOC.

The [Oxford Brookes University Research Ethics Committee](#) granted ethical approval for the collection and analysis of primary research data from FSLT12. Participants were recruited via the main WordPress site by posting an invitation to participate in research, which included a link to a participant information sheet, consent form, and course evaluation questionnaire. Participant data was anonymized and de-identified, and permission was sought to use direct quotes from research data such as personal blogs, interviews, and survey research data.

Sample

The focus of attention within the case study was FSLT12 participants, so in theory anyone who registered or participated within any element of FSLT12 could be regarded as what Bryman (2012) describes as the unit of analysis for sampling. However, in a case study making use of mixed methods, there will be a number of units within the case.

A quantitative analysis of numbers participating in specific areas of distributed open learning spaces of a MOOC potentially includes everyone who visits that learning space. Unless the space is tagged with a course identifier it may be impossible to fully estimate participation quantitatively. In FSLT12 it was

possible to identify everyone who registered for the Moodle site and those who actively participated in identifiable distributed course spaces (Table 1).

Table 1. *Level of participant activity in FSLT12*

Type of Activity	Number of FSLT12 Participants
Registered on Moodle	206 (100.0%)
Actively participated within identifiable FSLT12 distributed spaces ^a	67 (32.5%)
Posted to Moodle Discussion forums (minimum of one post)	52 (25.2%)
Aggregated blogs at course WordPress site	24 (11.7%)
Attended Blackboard Collaborate synchronous session 1	21 (10.2%)
Attended Blackboard Collaborate synchronous session 2	32 (15.5%)
Attended Blackboard Collaborate synchronous session 3	28 (13.6%)
Attended Blackboard Collaborate synchronous session 4	17 (8.3%)

^aMoodle discussion forums, aggregated personal blog, or attended a synchronous session.

Data Collection and Analysis

Just under 20% ($n = 41$) of registrants completed the course evaluation questionnaire via the link from the WordPress site. Respondents were given the option of remaining anonymous, so it was impossible to identify the representativeness of the sample, however it was clear that diverse participants experienced the course differently. This helped to identify a range of themes (see the Appendix to this paper) that were used to promote discussion during subsequent focus group interviews, which all registrants were invited to attend in Blackboard Collaborate. Two of these were carried out, each with an attendance of eight participants who represented a relatively diverse cross-section of members of FSLT12 in terms of experience of teaching in higher education, prior MOOC participation, international setting, and undertaking an assessed or non-assessed pathway. Active participants who represented the description of the specific target audience (new lecturers in higher education, who were undertaking the assessment pathway) were identified as a purposive sample and invited to attend individual semi-structured interviews: four of these were carried out. In order to reach a wider sweep of FLST12 registrants (in other words to include the views of those who had not been visibly active) a survey questionnaire focused on individual participation was e-mailed to every course registrant. Response rates were relatively low at 13.6% ($n = 28$), but over half of the respondents said that they had either read or commented on other participant blogs. Twenty-four participants [aggregated their blogs](#) at the FSLT12 WordPress site; these were found to be a rich source of reflective commentary on course experience and were considered to be a source of relevant research data. This was a complex sampling strategy, which aimed to capture data taking into account the diverse ways in which individuals chose to participate within FSLT12 (Table 2).

Table 2. *Data collection for the case study – sample sources and sizes*

Sample Source	Sample Size
Course evaluation questionnaire, link posted on course site	41 (19.9%)
Quantitative measures of individual active participation in distributed spaces and FSLT12 discussion forums	67 (32.5%)
Focus group interviews x 2 in synchronous audiographic platform	16 (7.8%)
Individual interviews	4 (1.9%)
Thematic analysis of aggregated blogs	24 (11.7%)
Survey questionnaire on experience of participation e-mailed to all FSLT12 registrants	28 (13.6%)

The analysis of quantitative data was statistically insignificant. However in mixed methods research it is recommended that sources of data are integrated (Bryman, 2012). Data collected from the course evaluation questionnaire, focus group interviews, individual interviews, survey, and aggregated blog posts were thematically analyzed (see the Appendix) with reference to the research questions defined earlier.

The overall thematic analysis (see the Appendix) was returned to the focus group and interview research participants for member checking and verification of participatory behavior themes. During the process of FSLT12 many participants expressed an interest in research and evaluation of MOOCs, and the team felt it appropriate to be transparent about research procedures. Given the diversity of FSLT12 some participants were experienced researchers; this provided a good opportunity to review trustworthiness of the data analysis. The collected research data was also peer-reviewed by the authors who independently

organized the many sources into themes and made comparisons in order to reach an overall consistent analysis.

The Learner Experience of Participation in FSLT12

Behaviors that respondents identified as participatory within FSLT12 were observing others, reading, discussion forum posting, blogging, and completion of assessment activities. Specific strategies to maintain individual participation were keeping the MOOC browser window open all the time and making a determined and deliberate attempt to participate as much as possible.

During the focus group interviews diverse identities emerged as participants spontaneously referred to themselves as "newbies" or "vets" in relation to MOOC participation. One participant described the roles as "*fresh and green versus lots of MOOC experience ... such a range*" (Focus group). These roles appeared to be mutually recognized.

In evaluating the learner experience of participation this dichotomy was used as a reference point to compare and contrast participatory experiences between novices and those who are experienced. Three main themes emerged: *navigation*, *transformational shift*, and *scaffolding by those who were more experienced*. These are discussed in turn below.

- **Navigation.** Different routes and approaches were taken; novices felt initially overwhelmed by technical issues, multiple channels, and a need to be able to multitask, which required too many initial participatory skills incorporating "*listening, reading and discussions all at the same time.*" (Course evaluation questionnaire)

The Moodle site was seen as "*delivering too much content all at once*" (Course evaluation questionnaire). The number of discussion forum posts in Moodle was highest during the opening week. An experienced participant in a blog post called this "*MOOC syndrome*": typical of enthusiastic starts within MOOCs, which quickly tail off. Some participants felt that FSLT12 was trying to do too much at once for a short course. Appearance of a "Welcome" discussion topic and a "Week 0" in advance of the advertised start date meant that people who had been following the developments more closely were already active and engaged in discussion by the time the advertised start date had arrived. This meant that some participants had the sense of arriving in the midst of ongoing activity. Conversely, some experienced participants felt very able to navigate the multiple channels. For example, one stated that he/she "*appreciated more structure than other MOOCs [he/she had] participated in*" (Course evaluation questionnaire).

Experienced participants also appeared to be more judicious about planning their route and their level of participation, as exemplified by the following quote: "*This is my sixth MOOC and I chose my level of participation*" (Course evaluation questionnaire). The fact that novices encountered navigation difficulties in an online environment is not unexpected and corresponds with the findings of other authors ([Fini, 2009](#); [Kop, 2011](#)).

- **Transformational shift.** Although novices initially felt overwhelmed, some, especially those who were undertaking the assessment route, remained active throughout the MOOC. A transformative shift was evident on realization that it is not necessary to join everything: "*Initial feeling of great pressure to participate...realized eventually that there was choice about this.*" (Interview 1)

This did require time and reflection to reach this point. One participant commented during an interview: "*Getting over that initial concern ... I realized that it was OK to observe, but that required effort, I spent a whole evening opening all of the different folders and channels, needed to immerse myself*" (Interview 2). Another participant wrote: "*A core moment in online participating is that when you begin to contribute after only following, observing or consuming*" (Experienced participant blog).

A core moment for transformative shifts was the synchronous sessions:

"The first synchronous session was an important milestone in getting to the point where I realized I didn't have to respond to everything. When I was hearing voices and when there was time to have a conversation with others involved in similar activities." (Focus group)

Some novices viewed assessment as a lever to promote a transformational shift in identity. One of them reflected as follows: *"My identity as a teacher has shifted contextually, my curiosity has been stimulated about digital literacies and developing them amongst learners and which ones are required for effective teaching"* (Interview 1). This contrasted with experiences of some participants, who expressed a view that *"not being assessed made it less meaningful to participate"* (Survey).

Connectivist-influenced MOOCs are designed for uncertainty, and this can have an impact on participant learning experiences and sense of personal identity: *"A MOOC allows me to play with uncertainty and depending on how my day is going this can be scary or liberating"* (Discussion forum). Some participants recognized the effect on their identity and how this might change over time in unexpected ways: *"It changed my learner identities from confidence and experienced to not having a clue and feeling like a novice"* (Focus group).

- **Scaffolding by "experienced participants."** Some registrants of FSLT12 who did not actively participate cited personal circumstances that impacted on time and commitment, but others said: *"I didn't know how to participate"* (Survey), and *"I did try but I was intimidated by the depth of the posts and my newness to higher education"* (Survey).

The expert lens of experienced participants recognized that it is challenging to engage MOOC newcomers, and an important skill is to support novices to cope with multi-channel working. One participant observed that *"those that are lost are missing out on an important new literacy"* (Focus group).

Assessed participants, especially novices, felt supported by the FSLT12 infrastructure and experienced participant expertise. There was more potential for peer facilitation and support for novices. This became evident in responses gathered during the focus group interviews. It was suggested that a core group of experienced volunteers could take responsibility for supporting individual groups within a cohort of novices, moderate back channels and build community at a micro level. Some of the novices reflected that they could have taken more opportunities to seek feedback and ask questions of experts. For instance, one participant said: *"This was a good opportunity to participate with teachers who have been teaching for longer ... I should have realized that it was OK to ask them for help"* (Interview 1).

There is a clear opportunity to establish informal networks for mentoring and potential for experienced participants to serve as support volunteers for future practice.

Learner Interaction with Content in FSLT12

Motivation to join FSLT12 was prompted by the subject matter. This was indicated on registrant signup records and applied to novices and experienced participants alike. The content of FSLT12 was identified as a clear framework for CPD and reflection.

- **Reflective practice.** Content that focused on reflective practice appeared to prompt this. This included learning activities and assessment tasks.

This was typical of all active participants, and particular evidence of this was found within participant blogs. For example, one participant wrote:

"My goal for my work in the FSLT MOOC is to understand and practice critical reflection more effectively and to learn how to create a space where my students can develop their own. I am grateful for the opportunity to join the FSLT community." (Experienced participant blog)

Another wrote: *"The content has encouraged my participation at a more thoughtful level and I have modelled reflection by using a blog"* (Novice participant blog).

Reflective content of FSLT12 was viewed as a facilitative tool to stimulate personal reflections on teaching and learning and to develop personal reflective skills:

"In the previous post I described briefly what some of the experience was like as a teacher of Media Studies. I am aware that I have not provide a 'critical analysis' from a

'number of perspectives' – such as my own, the learners involved, my colleagues and indeed, the literature." (Novice participant blog)

Learner Interaction with One Another

Survey responses suggested that active participants used the following channels to interact with each other: posting to discussion forums, responding to blog posts, attending synchronous sessions, and a face-to-face meeting entitled "[MOOCup](#)," which had been arranged via Twitter.

Two main themes emerged from the thematic analysis of all of the data, making sense of community for novices and experts, and reciprocal relationships, which are discussed below.

- ***Making sense of community for novices and experts.*** This category was seen as a skill that was required to *"sort out who these experts and the audience are"* (Interview 1). Becoming part of the community was viewed as an important confidence-builder and an opportunity to observe participatory behaviors. All interview participants were new to online teaching and they expressed the usefulness of observing how forums, blogs, and social media could be used for digital interaction and to see their use in teaching and learning practice. In the words of one participant: *"This opened my eyes as a teacher"* (Interview 2).

The synchronous sessions and individual blogs were important participatory areas for FSLT12, but the main thrust of observed participant interaction in FSLT12 occurred in the discussion forums. This is shown in Table 2 and evidenced in the following quote: *"In the MOOC forums there is quite a lively discussion this week (as there was last week), which got me thinking. One of the things that I've been pondering is the mode of participation"* (Experienced participant blog). Of the 67 active participants, 52 posted on the forums.

- ***Reciprocal relationships.*** The potential for reciprocity between diverse participants as a catalyst for active engagement became gradually apparent. Novice participants developed a sense of the establishment of a core FSLT12 community after a few weeks. One participant remarked: *"Interacting with experts has demonstrated different styles for pedagogy for online learning and different approaches for using technology in teaching"* (Interview 3).

The fact that the MOOC was an open online environment did not occur to everyone as a significant issue. For example one interview participant had not registered awareness that presentation of the microteaching assessment was open access. However, the possibility of potential for interactions in many spaces was regarded as an advantage for gaining rich feedback from many sources:

"The interactions between my peers and the facilitators were great, there was a lot of sharing of best practices and lived experiences, and I took a lot of things away; both things that I can immediately put into practice, and things that I need to read up on :-)." (Experienced participant blog)

Focus group interviewees identified the diversity of other participants as an important aspect of learning. The international context and the professional experiences of individuals provided a positive challenge as peer observers. This was an evident outcome of the microteaching assessment. The experienced were impressed with the novices and vice versa, which prompted rich and dialogic reciprocal feedback:

"There is just nothing else quite like social, networked learning to get your brain jazzed up about something. It's about risk, exploration, learning from others who are as wildly different and deeply the same as you are, to try and fail and try some more in a safe and welcoming environment." (Experienced participant blog)

Experienced participants' blog posts demonstrated reflection on a variety of personal MOOC experiences and the strategies they employ to locate themselves within the main mode of interaction in an individual MOOC: *"It seems to me, that my own personal strategy is 'biggest bang for the buck' – so wherever there are more people, that's where I participate"* (Experienced participant blog).

The digital skills of experienced participants enabled them to evaluate the impact of their own contribution and how individuals are interacting with their artifacts. For example: *"Google*

Analytics gives me information about visits to my blog during the last month" (Experienced participant blog).

Discussion

Threshold concepts have been described as akin to the opening up of a portal of understanding of previously unknown knowledge ([Meyer & Land, 2003](#)). They are a useful lens to explore why active participation led to learning for some in FSLT12.

One of the important features of a threshold concept is transformation, which means that once knowledge is understood an aspect of a practice or discipline will be transformed, irreversibly, and the learner will have crossed conceptual boundaries and have a changed discourse or identity. This is preceded by troublesome knowledge (Perkins, 2006) for the learner, where knowledge can be counterintuitive, incoherent, or alien. Another feature of a threshold concept is liminality; [Meyer and Land \(2003\)](#) describe this as "a suspended state of partial understanding or stuck place" (p. 10).

The theory is that as learners transcend steps in their understanding or attempt to gain mastery in their discipline or practice they will oscillate between new and old understandings. Cousin (2006) provides the example of the adolescent who will swing back and forth between child- and adult-like behaviors. Once a learner enters a liminal space they are engaged within a context for mastery. The liminal space may provide a sense of self-achievement, but may also be troublesome as personal identity shifts in an attempt to reach new understanding as old ways of doing and thinking about things are discarded, representing an ontological shift.

Learning in a cMOOC takes place over distributed platforms and in an abundance of information that many learners find overwhelming. Learners therefore need to develop skills of finding relevant information and become adept at filtering, picking and choosing information relevant to personal learning. High levels of critical capability (Kop & Bouchard, 2011) are required in addition to appropriate technical skills. This represents troublesome knowledge in a cMOOC.

Liminality was observed in FSLT12 in novice attempts to make sense of MOOC participation and observe and practice skills and behaviors associated with active participation. Reflection and time appeared to be important factors to facilitate this. The moments in FSLT12 when learners recognized the skills that were required for active participation by interacting with content and other learners was when personal learning became transformed. This could be viewed as a threshold concept and appeared significant when learners described identity shifts.

The liminal space is contrasted with the pre-liminal space where the learner remains completely static within their understanding ([Meyer & Land, 2003](#)). This could be said to correspond with those registrants for FSLT12 who stated in the survey questionnaire that they did not know how to participate; this is a significant issue for facilitators and providers of MOOCs to address. In addition the threshold concept theory suggests that once a threshold of understanding is crossed, it is hard for the learner to truly recall lack of understanding from a former pre-liminal or liminal phase. Although this case study demonstrated reciprocity between novice and experienced participants to some extent, it might be challenging for the experienced to realize or remember how difficult MOOC participation may be to those new to learning within distributed open environments.

[Downes \(2013a\)](#) maintains that connectivist MOOCs can enable learners to genuinely participate in the culture of a discipline by fostering the ability to operate across traverse networks, requiring learners to do something quite different from a traditional course. He provides an example of the difference between learning about physics and joining a community of physicists. This demonstrates a link between connectivism and communities of practice and also the work of Cousin (2006) on threshold concepts where the description of mastery of a discipline is exemplified in the difference between learning about economics and thinking like an economist. FSLT12 provided opportunities for novices to participate in the culture of teaching and learning in higher education by allowing participants the chance to move from learning about teaching to acting and thinking like a teacher.

Implications for Practice and Further Research

As a small group of online teachers, the team was interested in the outcomes of this case study in order to influence ongoing teaching practice. [Anderson and Dron \(2011\)](#) argue that high quality online learning exploits a range of pedagogies. Social constructivism was evident in FSLT12 where the facilitators developed content to stimulate discussion and placed high emphasis on dialogue in forums. As Anderson

and Dron point out, the social constructivist approach is not conducive to scaling to high numbers. They suggest that a good starting point for connectivism is to expose learners to networks and provide opportunities to gain self-determination in cognitive skills for learning and making connections of their own by creating opportunities for interaction. In this case study, liminality was seen to be an issue potentially impacting upon this; however, experienced participants to some extent provided good role models and facilitated connections with novices. This suggests that there are benefits to opening up online courses to enable learning to go beyond the faculty or the institution in order to maximize diversity. There is however more knowledge needed to develop models for active participation within MOOCs, and in particular making the most of experienced and novice interactions. It is interesting to note that Anderson and Dron describe the scalability of connectivism as low to medium. It could be arguable whether FSLT12 was numerically massive given that only 206 people registered. [Conole \(2013\)](#) suggests that with the proliferation of MOOCs, components of specific learning design will determine the degree of scalability of a MOOC. [Downes \(2013b\)](#) suggests that "[Dunbar's number](#)" of 150 should be the minimum number of active participants to qualify as a "massive" course. FSLT12 was therefore massive for Week 0 only when 206 people registered on the Moodle site. More important is that FSLT12 was prepared for massiveness and was designed according to cMOOC principles.

[Rodriguez's \(2012\)](#) review of MOOCs estimates active participation at less than 10% in four cMOOCs of varying registrant numbers (556 to 2,700). Comparatively an active participation rate of 32% in FSLT12 (see Table 1) may be significant but would be hard to generalize beyond this case study. [Watters \(2012\)](#) points out the high dropout rates of MOOCs and high numbers of readers/observers/lurkers, while Rodriguez asserts that a cMOOC offers the potential learner choice about how and when to participate. This presents challenges in estimating those participants who do not visibly interact but may be actively lurking. The usefulness of counting numbers is questionable. Emerging research methodologies in technology-enabled learning such as learning analytics ([Long & Siemens, 2011](#); [Siemens, 2012](#)) present alternative approaches for analyzing multiple and diverse interactions within a MOOC.

The authors observe that MOOC offerings are evolving rapidly with the hybridization of many cMOOC and xMOOC philosophies ([Roberts, Waite, Lovegrove, & Mackness, 2013](#)). Hybridization may lead to further knowledge about MOOC participation. Based on the authors' experiences of conducting this case study there was clear evidence of multi-MOOC participation. Some experienced participants were engaged concurrently in other MOOCs and openly compared their experiences and participatory behaviors between MOOCs and exposure to differing pedagogical philosophies. The fact that there appears to be a MOOC community who will deliberately expose themselves to many MOOC experiences makes them an interesting group for more longitudinal research to provide further insight into MOOC participation than can be provided by a single case study.

A hybrid MOOC called [E-Learning and Digital Cultures \(EDCMOOC\)](#) was recently offered by academics from another U.K. University, [The University of Edinburgh](#). One of the facilitators noted ([Sinclair, 2013](#), para. 3) that this MOOC was "stimulating a liminal state for many students," suggesting that the MOOC itself is a liminal space and a site where threshold concepts might be encountered. This resonates with the assertions made in this paper that participation within a MOOC is a threshold concept in and of itself.

Conclusion

This case study uncovered themes (see the Appendix), which were common to some active participants and derived from more than one source of data. The most frequently occurring themes were transformation of identity, reciprocal relationships, and reflective practice. Novice participants expressed initial uncertainties and experienced participants observed the difficulties they were experiencing. Reflective practice was important for active participants as an aspect of learning and a tool for self-expression.

The case study reported in this paper adds to the findings of earlier research on learner participation within MOOCs as discussed in the literature review, especially with regard to navigation across multiple channels. The course design of FSLT12 put participants in an area of troublesome knowledge and therefore a liminal space. The opportunity to develop reflective practice skills while in this space was an important factor for dealing with threshold concepts and led to transformative learning. Active participation is the vehicle through which these two concepts can be experienced. Navigation is an underpinning requirement, but of particular consequence in this case study was that the experienced participant presence highlighted some of the difficulties the novices were experiencing and triggers for active

participation. More could have been made of experienced expertise to support and orientate registrants new to the MOOC experience.

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Appendix: Themes Emerging from the Analysis of the Various Data Sources

Data Source	Themes
<i>Course evaluation questionnaire</i>	Overwhelming vs. well organized
	Navigation
	Technical issues
	Structure
	Judicious engagement
	Reflection and meta thoughts
	Sharing of knowledge
	Connectedness
	Multitasking
	Professional values/course identity
	Sensemaking of MOOC learning experience
	Reflection/reflective practice
	<i>Participant blog posts</i>
"MOOC syndrome"	
Lens of critical literature	
Autobiographical lens	
Threshold concepts/transformational moments	
Critical reflection	
<i>Individual interviews</i>	Navigation
	Making sense of MOOC community
	Judicious engagement
	Transformational moments
	Pragmatic participation
	Community of practice
	Needs for scaffolding
<i>Focus group interviews</i>	Navigation
	Orientation
	Community of practice (trust)
	Digital literacies
	Netiquette
<i>Survey focused on participation</i>	Differential views on participation
	Time
	Personal circumstances
	Perceived lack of prerequisite skills
	Facilitation
Judicious engagement	



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