Evaluating the BizMOOC project *Learning to Learn* MOOC: The OpenupEd Quality Framework in Action

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Abstract

This paper presents the concept of, and contextualises, Massive Open Online Courses (MOOCs). It subsequently evaluates a MOOC developed to address the European Commission LifeLong Learning (LLL) Key Competency of Learning to Learn during the ERASMUS+ funded BizMOOC project. The paper presents a case study example of the OpenupEd Framework evaluating the Learning to Learn MOOC. This paper presents evidence that an evaluation framework that emphasises the "open" element of MOOC and foregrounds iterative processes to improve the devel-opment of MOOC is vital in the creating genuinely "open" resources. A growing number of businesses, higher education institutions and other stakeholders are engaged, or have an interest, in developing MOOC. This paper adds value by providing a case study example of use of a MOOC evaluation framework and analysing the results.

Keywords:	MOOC; evaluation; Higher Education; Business; Quality Assurance; OpenupEd Framework; online learning; Massive Open Online Course; Open Education
JEL codes:	I23, L26

INTRODUCTION

This paper surveys and situates the concept of Massive Open Online Courses (MOOC)

and the state of the art on quality and evaluation of this type of online learning. Using a MOOC evaluation framework, originating from the European OpenupEd initiative,[1] the paper presents a case study analysis of two iterations of a MOOC developed as part of the three-year European Commission (EC) ERASMUS+ funded BizMOOC project (2016-2018).[2] The following analysis contributes to the identified lack of research into MOOC evaluation and provides a practical case study example of the OpenupEd Framework.

The BizMOOC project fostered relationships across business, wider society and Higher Education Institutes (HEIs) to increase collaboration and understanding of the potential of MOOC. The project produced state of art research and advice into MOOC in the form of the MOOC Book[3] and also created 3 MOOC aligned with selected EC Lifelong Learning (LLL) competencies. These competencies are "…new basic skills to be provided through lifelong learning as a key measure in Europe's response to globalisation and the shift to knowledge-based economies…" (European Commission, 2006). The MOOC's development was also informed the project's research on the barriers to participation and possibilities for MOOC for businesses and other stakeholders (see Friedl and Staubitz, 2018).

The eight-fold OpenupEd Quality Framework, which informed the evaluation of the BizMOOC project MOOC, was chosen following a systematic review of existing evaluation processes and literature. The OpenupEd Framework (which comprises of course and institutional frameworks which covering pedagogical, design and technical criteria) extends the European E-xcellence standard framework, a well-known "quality model" for online learning, through systematically presenting different examples of "openness" within the MOOC context (see Jansen, 2016 and Rosewell and Jansen, 2014).

LITERATURE REVIEW

Massive Open Online Courses (MOOCs)

MOOC are simultaneously an iteration of online learning and part of the wider story of open education (see for example, Rosewell & Jansen, 2014, p.89, Weller, 2014, p.6 and p.111 citing Yuan and Powell). MOOC have received a significant amount of press, particularly focused on the potential of this type of course to "disrupt" education at scale (see for example, Pappano, 2012 citing Anant Agarwal, Weller, 2014). Indeed, 4 years after the term MOOC was first coined (see Cormier, 2008) 2012 was described as "the year of the MOOC" (Pappano, 2012). MOOC have taken several different forms since their inception, from the initial connectivist cMOOCs (see p.93, Weller, 2014) to the transmission model of learning embodied by xMOOCs to a proliferation of further nuanced variations (see Conole, 2016 citing Downes, 2010, Clark, 2013 etc.). This reflects the move of MOOC from their original "interest in the possibilities that being open and networked" and roots in open education (see p.93-4, Weller, 2014) to MOOC that are not just varied in pedagogical approach but also offer diverse interpretations of what the composites of the term mean, particularly in regard to "open."

Many universities across the world have chosen to strategically invest in the development of MOOC. Examples include MOOC as onboarding for students, offering qualifications and learning for face-to-face and distance students and increasing understanding of learners

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[1] See: https://www.openuped.eu

[2] See: http://bizmooc.eu

[3] See: http://mooc-book.eu

through analytics from host platforms (see Brown, 2018). Friedl and Staubitz (2018) note that although there is growing interest in MOOC from business and other sectors in using MOOC, there is also a lack of research into the needs, engagement and reasons or challenges for business. In research conducted as part of the BizMOOC project there was relatively low awareness and engagement with MOOC in Europe, with their current use largely confined to Human Resources contexts and with some employers wary of the narratives around MOOC as a panacea for all training needs (p.35-6, Friedl et al, 2015).

At the beginning of 2018 there were over 800 higher education institutions involved in the creation and facilitation of MOOC, 9,400 courses on offer and 81 million students participating in a MOOC with numbers beginning to plateau as monetisation of some MOOC or features of MOOC becomes more common (see Shah, 2018). However, despite their popularity there are a number of issues with MOOC including typical learner demographics, their inclusiveness and engagement with marginalised and underrepresented groups (see Koller and Ng, 2013 and Creelman and Witthaus, 2018). There are also concerns regarding how best to evaluate MOOC, what "high quality" means in this context and whether existing evaluation standards for online learning are also applicable to this type of course.

Defining Quality in MOOC and Open Courses

What we mean by "high quality" and the factors that determine whether a course is "high quality" or not varies (see Jansen, Rosewell & Kear, 2017, Conole, 2016, Weller, 2014). There is much discussion in the existing literature regarding both the validity of MOOC being assessed against existing online or face-to-face quality metrics and consequently what evaluation criteria are suitable for MOOC (see, for example, DeBoer, Ho, Stump & Breslow, 2014; Hood & Littlejohn, 2017 and Stracke and Tan, 2018, Weller, 2014). De Boer et al (2014) for example argues that we need to reorientate our understanding of what "enrolment, participation, curriculum and achievement" looks like within the MOOC context as current analyses, which are used to assess formal learning (either face-to-face or online), are inadequate for understanding whether a MOOC has been successful.

One example of MOOC evaluation criteria that has come under scrutiny is completion rates, which are low compared to face-to-face courses, but have slowly increased more recently, due to improvements in a number of factors including start dates and methods of assessment (see Jordan, 2014 and 2015). As Weller (2014) notes there are two possible ways forward in response to this metric. The first is to deliberately develop MOOC to encourage retention (which may be necessary in some instances) and thus build into the course a variety of different mechanisms to encourage students to move through the material in a linear fashion (e.g. certification). The second is to deprioritise retention and engage more actively in shaping the course to reflect the fact that learners use selected parts of a course (see pp. 100-104, Weller, 2014). Prioritising individual learner motivation by providing a range of different "learning pathways" or different ways of engaging with the course over the broader instructor anticipation of what or why a learner is participating in a course and the need to complete is suggested by others including Stracke (2017) and Hood and Littlejohn (2017) (see p.289 & p.10, respectively). Consequently, this also has implications for platform choice and functionality. How "personalised" can some MOOC become, for example, if platforms utilise set formats for courses or all content is not available to view immediately on sign-up or in perpetuity at no cost?

The question of defining quality echoes broader concerns with how the concept of "quality" is used within discussions of open educational resources (OER), and open textbooks more specifically. As Wiley (2015) notes "…the core issue in determining the quality of any educational resource is the degree to which it supports *learning*." Although MOOC are not necessarily "open" (e.g. require no login to access material or have their content available on an open license so it can be reused, updated and modified) some of the issues highlighted by commentators (such as the lack of similar motivation for participating in a course) can be described in broad terms as having arisen as a consequence of a course being "open". DeBoer et al (2014) implicitly picks up on this when noting "…the common MOOC policy of allowing anyone and everyone to register is not one that ensures common backgrounds or intentions among registrants" (p.77). Of course, this aspect of "open" enrolment is not necessarily negative; it can offer the possibility of a more diverse range of experiences being reflected in the course discussion and connect learners who may be seeking to utilise course content in similar ways. As Weller (2014) notes in his discussion of MOOC quality, "four types of MOOC learners: completing, auditing, disengaging and sampling" have been identified by Kizilcec, Piech and Schneider (p.97); these could, for example, be used to help inform the better development and evaluation of MOOC and inform the development of "learner pathways."

Similarly, Hood and Littlejohn (2016) emphasise the multifaceted approach needed which "…recognise[s] that any attempt at categorisation must embrace multiplicity, acknowledging the diversity and often nuanced distinctions that can be made between MOOC designs, purposes, pedagogical approaches and learners" (p.4) whilst Bali (2014) argues that there is not a "genre" of pedagogy for MOOC but that each course should be assessed on its own merits, particularly given the variants in delivery, audiences, focus and pre-existing skills or familiarity with specific formats to participate (pp.44-5). It is clear that the evaluation of MOOC need to be both flexible and potentially able to deprioritise or prioritise metrics such as retention, as suggested by Weller (2014), to reflect the pedagogy and intention of the course.

METHODS

Hood and Littlejohn (2016) note that there are currently "two broad categories" into which the emerging literature on the evaluation of MOOC can be placed: the "more general and theoretical" and "empirical research studies" that develop frameworks for assessing quality (p.11). In instances where MOOC are evaluated frameworks that are used to assess online learning more generally, rather than specifically MOOC, have been utilised (see Hood and Littlejohn, 2016, Conole, 2016 and Lowenthal and Hodges, 2015). The foci of MOOC evaluation vary. For example, both Margaryan, Bianco and Littlejohn (2014) and Lowenthal and Hodges (2015) focus on MOOC instructional design and the use of the First Principles of Instruction and Quality Matters Frameworks to evaluate 76 cMOOC and xMOOC, and 6 STEM xMOOC on well-known MOOC provider platforms, respectively. Grover, Franz, Schneider and Pea (2013) focus on MOOC being a rewarding experience for every participant, underpinned by "collective learning" and the course's development informed by a framework that is focused on the learner's expectations, platform, learning analytics and pedagogy. Stracke and Tan (2018) focus on developing a

"Quality Reference Framework" for MOOC through seeking detailed feedback on experiences of participating, running and developing MOOC from different stakeholders.

Whilst there are many e-learning frameworks available that are, or could be used, to evaluate MOOC, there are few frameworks that include a specific acknowledgement of the "open" facet of this type of course. The OpenupEd initiative's framework is one such example and has an understanding of "open" that is both broad and inclusive: "…'openness' in the sense not only of no financial cost, but also open accessibility, open licensing policy, freedom of place, pace and time of study, open entry, and open pedagogy" (p.93, Rosewell and Jansen, 2014 citing Weller, 2013b). By foregrounding "open" the framework both avoids the blurring of "open" and no cost highlighted by Traxler (2018) whilst also encouraging MOOC creators to avoid "openwashing" (Watters, 2014). Jansen's (2016) claims that the OpenupEd Framework is "firmly rooted in the Open Education movement" (p. 5) are therefore justifiable. Moreover, in some senses, the framework could arguably be paralleled with the other initiatives aiming to take MOOC back to roots (see, e.g. Weller, 2014, 114-5 on Reclaim Open).

The OpenupEd Framework also explicitly reflects "European values" (p.93, Rosewell and Jansen, 2014, citing Commissioner Vassiliou of the European Commission). For these reasons, argues Jansen (2016) the OpenupEd Framework was the best method to underpin the evaluation of MOOC created as part of the BizMOOC project. It also enabled comparison between the different BizMOOC courses to produce a series of recommendations and best practices (see Zur, Karwinski, Friedl and Jansen, 2018). Finally, the deliberate flexibility of the framework was beneficial to the project, which aimed to both experiment with different MOOC types and offer both non-formal and formal MOOC learning opportunities.

The "features" or "guiding principles" of the OpenupEd Quality Label, which are reflected in associated checklists/frameworks related to both the course itself and the institutional provider, are as follows:

Table 1. The distinctive features of OpenupEd MOOCs (Jansen, 2016, p. 5-6 citing Jansen et al, 2016)

OpenupEd distinctive features	Explanation
Openness to Learners	This captures aspects such as: open entry (no formal admission requirements), freedom to study at time, place and pace of choice, and flexible pathways. A broader perspective stresses the importance of being open to learners' needs and providing for a wide range of lifelong learners.
Digital Openness	Courses should not only be freely available online but also allow application of open licensing so that material and data can be reused, remixed, reworked and redistributed (e.g. using CC BY-SA or similar).
Learner-centred approach	Courses should aid students to construct their own learning from a rich environment and to share and communicate it with others; they should not simply focus on the transmission of content knowledge to students.
Independent Learning	Courses should provide high quality materials to enable an independent learner to progress through self-study.
Media-supported Interaction	Course materials should make the best use of online affordances (interactivity, communication, collaboration) as well as rich media (video and audio) to engage students in their learning.

OpenupEd distinctive features	Explanation
Recognition Options	Successful course completion should be recognised as indicating worthwhile educational achievement.
Quality Focus	There should be a consistent focus on quality in the production and presentation of a course.
Spectrum of Diversity	Courses should be inclusive and accessible to a wide diversity of citizens; they should allow a spectrum of approaches and contexts, accounting for a variety of language, culture, setting, pedagogics and technologies.

Source: own study.

The *Learning to Learn* MOOC had two iterations: *Learning with MOOC for Professional Development* and its successor, *Digital Skills, Digital Learning*. Both iterations were self-paced, 4-week courses with a total of 12 hours study and utilised a range of existing OER as part of their development process. The courses were hosted on The Open University's OpenLearn Create platform. OpenLearn Create[4] is a Moodle based open course platform which can be used by individuals, organisations and institutions to host openly licensed content.

Both MOOC covered topics such as "…personal development, critical thinking, interpersonal skills, career management skills and 'learning to learn' for lifelong learning" (European Commission, 2018, p. 34; see also European Commission, 2006 and Pietkiewicz, 2017) in addition to "…the ability to learn through MOOCs … and to develop web literacies" which was particularly amplified in the second iteration (BizMOOC Detailed Project Description, 2015, p. 72 see also Friedl, 2015 and Pitt, de los Arcos, Koppel, Miani and Sancin, 2018, p.10 for both sets of learning objectives.). As "Learning to Learn" covers many core skills, the MOOC had a very broad set of target audiences, including strands from all three project target groups (Higher Education Institutions (HEI's), Society and Business) as well as potentially providing a route into the other MOOC, which were focused on intrapreneurship and innovation and were primarily aimed at business employees and employers.[5]

The course production process for all BizMOOC courses began late winter/early Spring 2017 with *Learning with MOOC…* released at the end of September 2017 and the second iteration *Digital Skills…* released April 2018. There was agreement across the Consortium to use The Open University's Learning Design principles which "…puts the learning journey at the heart of the design process" (Open University Learning Design, n.d.) and an initial workshop to share these principles and practices was held early Spring 2017.[6] A variety of promotional strategies and activity took place to promote the MOOC to stakeholder groups.

The evaluation of the BizMOOC courses, which was based on the OpenupEd Framework, utilised a mixed methods approach and was a multi-stakeholder iterative process. The evaluation process, which can be seen in Figure 1 below, took place throughout both the development and facilitation of both iterations of *Learning to Learn*, spanning a 1-year period from May 2017-May 2018 (see Pitt et al, 2018, pp.8-9).

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[4] See: http://www.open.edu/openlearncreate/
[5] See: http://bizmooc.eu/pilot-moocs/
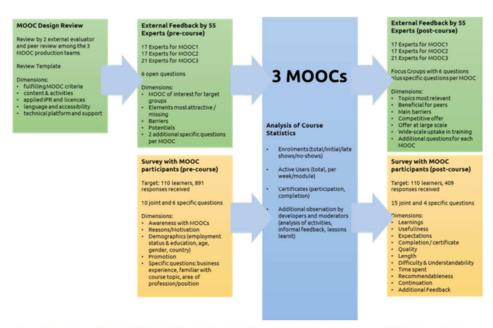[6] See: http://www.open.ac.uk/iet/learning-design/ and Galley, R. (2015)

Figure 1: Overview to the BizMOOC Evaluation Process on the three Pilot MOOCs, done in a sequential mixed-methods approach. Qualitative-dominated part marked in green, quantitative-dominated part marked in yellow. See the following pages for description of each block. Source: Own work.

Figure 1. Screenshot of p27, Zur et al (2018)
Source: Zur et al (2018).

RESULTS

Table 2 presents the OpenupEd Quality Framework in relation both iterations of the *Learning to Learn* MOOC and the OpenLearn Create platform. It summarises and categorises both how these "features" were addressed by *Learning to Learn*, based on the 'explanations' criteria provided in Table 1. Table 2 also presents related feedback received throughout the evaluation process (e.g. through learner surveys, design and expert reviews) and how this was addressed (where applicable) (Pitt et al, 2018). Further analysis of the evaluation processes and outcomes can be found in Pitt (2018) and Zur et al (2018). The feedback is summarised and analysed in the following section.

Table 2. The OpenupEd Quality Framework and evaluation of the BizMOOC Learning to Learn MOOC

	Feature	How the Learning to Learn MOOC (iteration one) addresses each feature	Evaluation feedback
1	Openness to Learners	No formal entry requirements; LLL Competency "Learning to Learn" fundamental to other competencies; Created with a range of learners in mind and accessible with no prior knowledge required; Flexible in how learners could use the course but did not offer "flexible pathways";	For most course participants this was their first experience of studying with a MOOC; Positive feedback from both post-course surveys on quality of material, relevance, self-paced nature of course, "clarity" and activities

	Feature	How the Learning to Learn MOOC (iteration one) addresses each feature	Evaluation feedback
		Open enrolment with no fixed start/end dates.	(see Pitt et al, 2018, pp. 27 & 32 & 33).
2	Digital Openness	Course created using tried and tested existing open content, where appropriate; Both iterations of the MOOC licensed CC BY 4.0. to enable reuse and remix etc. All course content immediately available to learners once signed in to OpenLearn Create. Course was originally available to anyone regardless of whether signed up or not, however the course content was then wall-gardened as this was deemed essential for analytics/tracking of how the course was being used.	OpenLearn Create sign-on process was perceived as a barrier to participation by some reviewers. This is a platform restriction and it's not currently possible to change the required information.
3	Learner-centred approach	Both versions of the MOOC were reflective courses with sharing amongst participants in forums at selected points.	External experts responded positively to course's focus on reflection, with suggestions for public sharing/examples to be included in iteration 2 (Ibid, p. 22). The course was also restructured for iteration 2 including non-reflective focused activities (see Ibid, p.23).
4	Independent Learning	OER reused in the courses had already been tried and tested. All course content immediately available to learners once enrolled onto the course. This enabled the learner to review material and choose whether/how to use it.	One focus group reported that material could be made more applicable to their context (Ibid, p. 33). Similarly, translation to other languages was also requested by reviewers. This is possible in the future due to CC BY 4.0 licensing.
5	Media-supported Interaction	4 embedded and 1 linked out video in first iteration of MOOC. There was no collaborative activity in this MOOC. Communication between participants was limited to the course forums.	Increase number of videos (now 7 embedded and 1 linked out). Inclusion of quiz in second iteration. Limited facilitation was introduced during the second iteration (facilitator activity in forums April-May 2018). Increased forum activity, a quiz and images in second iteration.
6	Recognition Options	Learners were eligible for a Statement of Participation upon completion of all course content and submission of a forum post.	Whilst expert feedback was divided on the Statement of Participation, limited post-course survey feedback for iteration 1 and 2 revealed that 85.7% (n=6) and 100% (n=4) of participants respectively, found the statement "motivating" (Ibid, pp. 27 & 32)

	Feature	How the Learning to Learn MOOC (iteration one) addresses each feature	Evaluation feedback
7	Quality Focus	The BizMOOC project had a detailed, iterative course production process in place in addition to using well-established learning design principles, and a variety of evaluative measures before, during and after the course was released. These measures included external expert feedback and feedback from learners through pre- and post-course surveys.	Learner feedback for both iterations was overall positive (see above).
8	Spectrum of Diversity	Alt-attributes were included with images. Screen reader compatible material. Course material used wide range of resources and incorporated real life experiences inc. MOOC study and MOOC resources in non-English languages in the second iteration. MOOC delivered in English but due to CC BY 4.0 license could be translated into other languages; Videos were not subtitled/transcribed. This was due in part to the tight delivery schedule for the course but also because some videos were hosted outside of the course platform.	Wider range of non-English language resources included in second iteration; OpenLearn Create currently not W3C and WCPG 2.0 compliant (the BizMOOC project ideal standard); Accessibility on some mobile devices was reported as an issue by external/internal reviewers.

Source: own study.

DISCUSSION

Assessing the "distinctive features" of OpenupEd MOOC against the *Learning to Learn* MOOC revealed the course to be largely successful and "open" to varying degrees across all 8 features. In summary:

Openness to Learners: The MOOC was a self-paced course, with no set start/end dates and no entry requirements. It was aimed at a broad range of learners but did not offer a variety of "flexible pathways" to different learners. However, all course content was immediately available upon sign-up, which enabled learners to potentially use the content as they deemed appropriate. The course content was checked to ensure that it addressed all topics agreed for the LLL competency.

Digital Openness: The *Learning to Learn* MOOC reused quality existing OER and itself was licensed CC BY 4.0 to enable reuse. Further, OpenLearn Create is available for anyone to utilise and so offers a reproducible example of a MOOC. There was no fee to participate in the course. However, what is meant by "freely available online" in this context? The Design Review was particularly focused on the "open" aspects of each MOOC and notes five areas for a course to be assessed against, one of which clarifies this requirement: "…course content is always accessible once enrolled."[7] As "freely available online" could be interpreted as no requirement to sign-in to access materials, BizMOOC took a more liberal interpretation of "open" which arguably illustrates an implicit tension not uncommon to OER and MOOC when

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[7] See the *Review Template MOOC Design*: http://mooc-book.eu/index/learn-more/resources/

needing to evaluate impact. Project requirements to track metrics such as enrolment, certification and engagement meant that, as tracking was only possible if participants were logged into the MOOC, we needed to mandate the sign-in function to access materials.

Learner-centred Approach: As all course material was immediately accessible upon sign-in learners could potentially "construct their own learning." However, as the course was designed to be self-paced and reflective, forum contribution was built into the course at specific points. More instructor engagement with learners during the second iteration was also introduced to increase contribution.

Independent Study: The *Learning to Learn* MOOC comprised of high quality, tried and tested OER which received positive feedback from learners. Self-study was possible as the course emphasised reflection on one's own practice and made all material available upon sign-up.

Media-Supported Interaction: As it was self-paced the course necessarily leaned more to "independent study." Videos were included in the course content. "Interactivity, communication and collaboration" took place through forums although, aside from one contribution to a forum, there was no formal requirement to collaborate with other learners.

Recognition Options: The first iteration of the MOOC awarded a Statement of Participation for learners who completed all sections of the course and contributed to one forum. Overall participants viewed the Statement as "motivating." Of note is that this "principle" neither advocates for course completion (which could potentially contradict encouraging multiple and learner constructed "pathways" through course content) or for formal institutional recognition of completing a course. This reflects the range of the framework's intended users (e.g. not only institutions but individuals) but also highlights the wider issue of non-formal learning recognition.

Quality Focus: In addition to utilising tried and tested OER as part of the course, there was a "consistent focus on quality" throughout the course creation process due to iterative evaluation process outlined above.

Spectrum of Diversity: This "principle" highlights the need for "a spectrum of approaches of contexts" to be included in the MOOC. *Learning to Learn* made improvements by including a broader range of non-English language resources in the second iteration and could make further improvements to the course by translating the materials and providing transcription for some assets. Implicit in course "accessibility" is also that learners are aware the course exists and this highlights effective targeted promotion. Although compliant with some accessibility requirements, there were platform restrictions with fulfilling some criteria.

Finally, it is worth remarking on *Learning to Learn* within the context of broader evaluation metrics. Although the OpenupEd Framework does not specify a number of learners the course should enrol to be described as "massive" (the focus is on creating a course that does not become burdensome at scale)[8] there was a target of 5000 learners for all 3 MOOC (p.24, Zur et al, 2018). 333 learners enrolled to participate in *Learning to Learn* (p.16, Pitt et al, 2018). Although this number of enrolments is low in comparison to the other BizMOOC pilots, numbers are arguably reasonable when contextualised. *Learning to Learn* was the only self-paced course in BizMOOC and compares favourably when contextualised within the average number of enrolments across 39 badged open courses on OpenLearn Create (see pp.16-17, Pitt et al, 2018). With 10.9% of enrolled

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[8] See Ibid.

participants completing the course *Learning to Learn* achieved higher completion rates than Jordan's (2014) reported average of 6.5% (see pp.16-17, Pitt et al, 2018).

Moreover, rather than choosing one or the other response to the metric of completion (see Weller, 2014), the *Learning to Learn* MOOC appears to try to satisfy both approaches by encouraging learners to complete the course through a Statement of Participation whilst also enabling participants to potentially create their own "learning pathways" by giving access to all course materials and having no official start/end date. Whilst it is difficult to know whether learners who utilised only parts of the course were satisfied with the materials (as the post-course survey was only offered to those that had gained the certificate) participants that did respond to the survey reported satisfaction on a number of different criteria (see Table 2). Enabling all learners regardless of how they use course material to feedback would be an improvement to any further iteration of the course.

Reflecting on the *Learning to Learn* MOOC within the context of the OpenupEd Framework highlights two challenges. The first is symptomatic of identifying "distinctive features" that should be applicable to all types of MOOC. As a self-paced course, *Learning to Learn* could not foreground collaborative activity as there was no guarantee of active learners at a similar stage in the course. Second, when reflecting on "features" such as *Media-supported Interaction*, it is clear that platform choice and functionality are critical. The type of platform used to facilitate a course impacts not only on what is possible during the course design process (e.g. what types of assessment and media you are able to use) but also accessibility of content for study and reuse purposes. Even OpenLearn Create, a platform with a high degree of flexibility and varied functionality, specifically designed for the delivery of open content, was still, at the end of 2017, actively working towards W3C compliance and compatibility with mobile devices, for example.[9] This may have impacted the course's ability to offer the "freedom to study at time, place and pace of choice" which the *Openness to Learners* "feature" highlights.

Finally, reflecting on the OpenupEd Framework also highlights the main benefits of extending e-learning frameworks to broadly reflect the concept of MOOC. As noted earlier, just as "openwashing" occurs in relation to OER (Watters, 2014), so it also occurs in relation to MOOC. The OpenupEd Framework, by emphasising and grounding the framework in open education offers a valuable tool to counteract these tendencies. Further, although some "features" are open to interpretation, the OpenupEd Framework does reflect the "social justice" aspects of openness that Watters (2014) argues we should be aiming for through "distinctive features" such as "spectrum of diversity" and "openness to learners", for example.

CONCLUSION

This paper has focused on a reflective case study example of a MOOC that was evaluated as part of the BizMOOC project. By revisiting the project evaluation and the OpenupEd Framework that underpinned this process, this paper presents a clear example of how the framework's "guiding principles" help surface different facets of MOOC, and in particular its "open" aspects.

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[9] Personal correspondence between Beck Pitt and Anna Page (13 November 2017) and also http://www.open.edu/openlearncreate/local/ocwfaqs/faq.php

MOOC and other open learning opportunities have the potential to contribute to developing LLL Competencies in Europe and supporting business needs but care and attention to how best to serve and engage with target learner groups is needed. This requires a robust, well-developed framework and iterative evaluation. As this paper shows the OpenupEd Framework is well placed to provide a MOOC specific framework as it's "guiding principles" are both flexible and inclusive, and informed by pre-existing knowledge.

Although focused on the evaluation of one MOOC, this paper's approach could be developed and extended to assess the other BizMOOC MOOC (which underwent the same evaluation processes) or used to assess other types of MOOC through reuse of the project's artefacts. Issues highlighted in this paper's analysis could conversely be used to refine the description of the "guiding principles."

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