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LEARNING IN MOOCS: THE [UN]DEMOCRATISATION OF LEARNING

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Massive open online courses have been signaled as a disruptive and democratizing force in online, distance education. This position paper critiques these claims, examining the tensions between viewing MOOCs as products and students as customers, and the perspective of students as learners who may, or might not, be able to determine their own learning pathway. The capacity, or non-ability, to self-regulate learning leads to inequalities in the ways learners experience MOOCs. While some MOOCs have contributed to change, many replicate and reinforce education that privilege the elite. This paper argues a need to support the development of digital skills and core competencies, including the ability to self-regulate learning, to ensure learners can participate in a new democracy of open, online learning.

Introduction: MOOCs as disruptors and democratisers

Massive open online courses have been signaled as a disruptive and democratising force in online, distance education. MOOCs are characterised by the scale and diversity of learners. Thousands of learners who participate in a MOOC bring a range of motivations, intentions, prior knowledge and experience. These can be used mutually to enhance learning within the MOOC and, since there are a large number of learners, there are numerous opportunities for each learner to access ideas and feedback from many other people. Therefore, the scale and diversity of a MOOC are valuable assets that can be used to support learning. Paradoxically, these characteristics of scale and diversity leads to different approaches to learning within a MOOC, posing challenges for MOOC designers and facilitators and leading to a number of contradictions associated with MOOCs.

One of the most visible contradictions is that, although MOOCs are opening up access to education, they tend to attract people who have already experienced university education (Liyanagunawardena et al, 2015). Second, rather than offering scaffolds that support people who are not able to act as autonomous learners, MOOCs often are designed to be used by people who are already able to learn. Third, like traditional education systems, MOOCs often require learners to conform to expected norms, rather than freeing learners to chart their own pathways. These norms sustain the traditional hierarchy within which the novice learner is subjugate to the expert teacher. Finally, a troubling feature of MOOCs is that this power structure is not always visible, since it is embedded partly within the algorithms and analytics underpin MOOC tools and platforms.

This position paper explores these incongruities. Taking the learner's perspective, the paper focuses on how learners participate within and self-regulate their learning in a MOOC. The paper argues that variations in participation are to be expected where large numbers of learners engage in learning with diverse motivations. This brings into question forms of support based on learner behaviours and actions captured by learning analytics that correlate with completion rates in MOOCs. Instead support and analytics should be targeted towards supporting MOOC learners in identifying and achieving their own learning goals, rather than course outcomes. The paper emphasises that the ability to self-regulate learning is a critical competency for open, online learning.

What research tells us: Assumptions that characterise MOOCs

Learners experience MOOCs in ways that are not expected by the course designers and facilitators or even by some of the other learners. Expectations of how students learn in a MOOC are underscored by a number of assumptions.

First, each learner engages differently in a MOOC, guided and influenced by their own motivations and goals. Yet, there often is an assumption that by enrolling in a course, the student signals an intention to engage within and complete the course. Our own research has produced data on the motivations that fuel learners' engagement in MOOCs (Littlejohn et al, 2016). These motivations are broader than completing a course. Some learners aim simply to 'be present' or to 'experience a MOOC' (Milligan, Margaryan & Littlejohn, 2013; Rest, 2017). Some MOOC learners choose to zone in on a particular concept they want to learn, rather than engaging in the whole course (Littlejohn et al, 2016). This makes it difficult for tutors to know whether learners who have dropped out of a MOOC have learned what

they want to learn and signals a need to rethink the metrics to measure online learning (Littlejohn & Milligan, 2016).

And yet, despite the extensive research and data, rather than freeing learners to chart their own pathways, the design and ways of working on MOOCs requires learners to conform to expected norms. The very act of learning autonomously often causes tensions, most noticeably when learners choose to drop out of a MOOC, rather than complete a course as expected, or when they observe others learning, rather than contributing actively. The emphasis on the individual learner as an active agent charting their own learning journey sometimes conflicts with the expectation in MOOCs that learners conform to accepted norms. This expectation that learners conform to accepted 'ways of being' in a MOOC isolates those who plan their own pathway.

A second assumption is that student activity takes place in a defined space - the MOOC platform. If learners are not visible on the platform, the assumption is that they are not engaged in learning. Yet students may be very active and engaged in their own environments. There is ample evidence that students plan and self-organize alternative forms of interaction and collaboration outside MOOC platforms, sometimes interacting online through social media or meeting in physical locations (Lin et al , 2015; Vale and Littlejohn, 2014). Relatively little is known about how MOOC learners engage.

MOOC platforms make it possible to analyse in real time the digital traces of learners as they dip in and out of courses, contribute to course discussions, complete courses or assessments. These traces even offer hints as to how learners feel about learning. However, focusing on these fragments of how people learn leads to a fractured view of the learner's progress in relation to his or her own goals. For example, when a student drops out a MOOC it may be because she has not learned or, alternatively, because she has studied what she intended to learn. Yet socio-technical scaffold systems may try to encourage the learner to complete the MOOC. Rather than emancipating her to follow a self-determined pathway, these scaffolds might subjugate her into compliance with the MOOC design. This problem sustains the traditional hierarchy between the educators (those that create MOOCs and technology systems) and the learners (those who use these courses and systems, such that empowered system 'producers' can exploit the consumer). This social order is not always visible, since it is embedded within the algorithms and analytics that power MOOC tools and platforms. This problem signals the need to reconceptualise the ways learners can participate in MOOCs to accommodate learners with diametrically opposed intentions, motivations and goals. To understand the choices each learner makes it is critical to have an all-inclusive view of his or her interactions with all the social, cultural and material environments they

are in contact with and to examine the internal, psychological processes of learning, not just the external traces.

Third, MOOCs are designed to be used by people who are already able to learn and may unknowingly be excluding the voices of some learners. There is an assumption that students are able to learn autonomously in open, online environments, even when support from tutors is limited. Yet research confirms that not all of the broad range of MOOC learners are able to learn independently (Milligan, Littlejohn & Margaryan, 2013; Milligan & Littlejohn, 2014; Milligan & Littlejohn, 2017). The outcomes of a particular learning experience will differ considerably depending on the student and his or her ability to learn, leading to what Selwyn (2016, p.31) describes as 'inequalities of participation'. The solutions to support those who are unable to learn autonomously focus on using course design or analytics systems to serve up a tailored set of course materials, rather than supporting students to become autonomous learners and improve their ability to navigate open online learning. These solutions may over-simplify interpretation of students' behaviours in MOOCs and may aggravate and intensify inequalities of participation.

Critical competencies for learning in MOOCs

Analysis of personal motivation, goal setting, strategic planning and learning progress may be better predictors for learning attainment than analysis of progress in relation to course objectives. Research illustrates that high self-regulators strategically manage their time and tasks. They select and engage in sections of a MOOC that support them meet their own goals, whether to attain a course certificate or to learn specific concepts or skills that they perceive as important. These learners may not appear to be engaged to learning, yet they intentionally are being selective about what they learn.

There have been proposals to design MOOCs with analytic tools that support learners in planning and monitoring time management to learners, focusing on workload and analyses of average times devoted by learners based on their previous backgrounds. These tools will be most useful for learners with low self-regulation who need support with task planning and time management. However, Morozov (2014) suggests that algorithms and analytics are concerned with predictive analysis with little concern for wider questions of causation, context of consequences.

While learning analytics provide the potential to personalise the learning experiences and opportunities of MOOC learners, the extent to which they can do this is questionable. Some approaches to learning analytics promote a narrow, static view of desired outcomes and norms of behaviour in a MOOC which belie the fluidity and flexibility of the learning opportunities that MOOCs can offer. There is a danger than over-reliance on learning analytics for understanding and measuring learning will lead to what Biesta (2007) has termed 'normative validity', that 'whether we are indeed measuring what we value, or whether we are just measuring what we can easily measure and thus end up valuing what we [can] measure'.

Currently analytics tends to measure what can easily be measured – retention, completion and certification - rather than what is difficult to measure but is critically important to learning – learner motivation, goals, self-regulation and agency.

Selwyn (2016, p72) suggests that rather than personalizing the learning experience, analytics is reinforcing mass customization of education through large systems. We need to continue to question if and how learning analytics might 'personalise' MOOC learning to make sure this 'personalisation' is to the individual needs or goals of the learner rather to the behavioural norms and desired outcomes of the MOOC provider.

The ability to self-regulate learning is a critical competency for open, online learning. However, supporting people in learning how to learn is complex and resource intensive. The positioning of courses and qualifications as 'products' that can be consumed by the masses may be preventing MOOC providers from ensuring that learners are able to learn and addressing inequalities that impede some people from benefitting from MOOCs.

References

Biesta, G. (2007). Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational theory*, 57(1), 1-22.

Littlejohn, A.& Milligan, C. (2015) Designing MOOCs for professional learners: Tools and patterns to encourage self-regulated learning, *eLearning Papers*, Special Issue on Design Patterns for Open Online Teaching and Learning, 42 <http://www.openeducationeuropa.eu/en/node/170924>

- Littlejohn, A., Hood, N., Milligan, C., & Mustain, P. (2016). Learning in MOOCs: Motivations and self-regulated learning in MOOCs. *The Internet and Higher Education, 29*, 40-48.
- Liyanagunawardena, T. R., Lundqvist, K. Ø., & Williams, S. A. (2015). Who are with us: MOOC learners on a FutureLearn course. *British Journal of Educational Technology, 46*(3), 557-569.
- Milligan, C., & Littlejohn, A. (2017). Why Study on a MOOC? The Motives of Students and Professionals. *The International Review of Research in Open and Distributed Learning, 18*(2).
- Milligan, C., & Littlejohn, A. (2016). How health professionals regulate their learning in massive open online courses. *The Internet and higher education, 31*, 113-121.
- Milligan, C., & Littlejohn, A. (2014). Supporting professional learning in a massive open online course. *The International Review of Research in Open and Distributed Learning, 15*(5).
- Milligan, C., Littlejohn, A., & Margaryan, A. (2013). Patterns of engagement in connectivist MOOCs. *Journal of Online Learning and Teaching, 9*(2), 149.
- Morozov, E. (2014). *To save everything, click here: The folly of technological solutionism*. PublicAffairs.
- Rest, L. W. N. (2017). Toward a Typology of MOOC Activity Patterns. *Digital Education: Out to the World and Back to the Campus, 134*.
- Selwyn, N. (2016). *Education and technology: Key issues and debates*. Bloomsbury Publishing.
- Vale, K., & Littlejohn, A. (2014). Massive Open Online Courses, *Reusing Open Resources: Learning in Open Networks for Work, Life and Education, 138*.