Learner engagement in MOOCs: research using the UK Engagement Survey and interviews

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Background to study

MOOCs are entering the UK higher education landscape accompanied by somewhat formidable expectations. Their development is rapid, high numbers of people are registering, and resources continue to be invested despite business models remaining unclear (BIS, 2013).

Much of the existing critique has centred on the high recruitment / low follow-through phenomenon of MOOCs. This has been described in educational terms either as an indication of poor quality (Parr, 2013), or as the rational behaviour of discerning consumers of a freely available product (Clow, 2013).

In general, follow-through from registering, to active participation and completion of most learning activities, varies from 5% (Hill, 2013) to 25% (Belanger & Thornton, 2013), depending at which point numbers are reported. While research into engagement with more traditional forms of higher education offers important insights, there are limitations as to how directly it can be applied; the online nature of MOOCs, combined with diverse purposes, media, topics and target audiences, mean that 'researchable' forms of engagement are fewer.

Method and key findings

The research sought to discover how learners appraised their engagement in learning. Volunteers from two of Southampton's FutureLearn MOOCs completed components of the UKES 2014 survey (Buckley, 2014) towards the end of their six-week course. Ethical approval, gained through Faculty and University processes, required an *opt-in only* approach. The survey response rate, from learners still completing activities and tests after six weeks, was 34%, just under half of whom offered demographic data including age range, gender, current occupational status, disability, area of employment, educational attainment and country of

residence. A sub-group additionally volunteered to be interviewed and this component of the research is underway.

Participant characteristics were broadly similar to the wider MOOC learner population (Parr, 2013). A largely degree-educated cohort, 86% of whom were graduates, showed a skew towards the older age bands; 50% were over 55 years of age. A significant proportion (36%) identified as retired, followed by 49% in full or part time work. Disability was reported by between 10-16% of survey participants, higher than the 7-8% reported in higher education (HESA, 2013; UCAS, 2013). Around 20% of participants lived outside of the UK, in 38 different countries. UKES data came from just under a thousand people in total.

Findings

Results of the UKES 2014 showed that of the seven engagement constructs, aspects of *reflective and integrative learning, higher order learning* and *engaging in research and research methods* elicited high response rates when treated as composites, using an index score. As might be expected in an online course, the lowest index score was for *collaborative learning* – explaining course materials to peers and asking other learners for help – with differences being evident between the two MOOCs. In one cohort, a quarter of participants reported interacting with others often and very often.

In contrast, a lower proportion of MOOC learners reported *memorising course content* or *applying facts, theories or methods to new situations*. This finding, viewed in light of unpublished research by Littlejohn and Milligan (2014), suggests that MOOC learners require reasons, or prompting, to apply online learning. Intuitively the individual and structured nature of the courses seems less likely to offer scope for rehearsal, or testing of ideas, than more traditional and social forms of learning.

The highest-ranked UKES construct was *reflective and integrative learning.* In general participants reported connecting new ideas to previous learning and to social issues and problems, as well as changing their minds and viewing ideas from new perspectives. This is encouraging for MOOC designers and curriculum designers, as it offers an indication of the kinds of learning activities suited to this form of learning. It has relevance not only to

blended learning and the 'flipped classroom', but to adult, work-based and lifelong learning more generally.

The UKES engagement construct of particular note is that of *engagement with research*. Both MOOCs showed an overwhelming majority felt they learned about the results of current research and methods, actively exploring their own knowledge base and the ways in which knowledge is created. Over two thirds of *Web Science* and over 90% of *Exploring our Oceans* participants reported learning about current research *very much* or *quite a bit*. This was a very deliberate goal of the MOOC developers, all active researchers, and suggests the online medium is an effective method of engaging learners in a complex topic.

Far fewer *explored own or open-ended lines of enquiry,* and similar proportions, under 20%, *actively participated in creating knowledge*, again reflecting the structured nature of online learning.

When asked whether the MOOC had *challenged* them to do their best work, between two-thirds to three quarters answered *very much* or *quite a bit*, particularly (but not exclusively) people with higher degrees. *Critical thinking* emerged as a skill over two thirds engaged in frequently.

Discussion and implications

Findings reflect the well-educated, older cohort generally thought to be attracted to MOOCs. Younger learners, and people with below degree level educational attainment, although few in number, reported equivalent or higher levels of engagement. This suggests that MOOCs need to be reaching different sections of the population if the objective of widening access to study in higher education is to be achieved. Given the successful engagement of many who persisted, attracting a more diverse cohort is a challenge for marketers and those communicating key messages about MOOCs.

Conclusion / recommendations

The UKES 2014 survey tool contributed to our knowledge and understanding of MOOC learners, and provided an alternative 'MOOC shaped' profile of engagement. However if MOOCs are to widen access to higher education, they will need to begin to reach the key groups targeted by the UK government (OFFA 2014). MOOCs have the potential to attract a

very diverse cohort, enabling intergenerational and international networks of learners to be formed. To become effective 'stepping stones' to higher education, accreditation and forms of assessment that will attract UCAS points will be necessary.

976 words

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