Crowds, learning and knowledge construction: questions of power and responsibility for the academy

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Over the past few years, two forms of crowd-based initiatives have been supported and facilitated by universities. First is the focus on Massive Open Online Courses (MOOCs) where thousands of people are encouraged to learn together, and the second is digitally enabled citizen science initiatives where the general public are encouraged to help out on a voluntary basis with varied tasks related to university projects in the sciences and the humanities.

Both of these initiatives can be critiqued. The most prevalent form of MOOC design that has emerged in recent years prioritises individual learning of a style that has strong behaviourist undertones, lacks awareness of the global audience, and plays to the strengths of those learners with significant experience of education. In citizen science, much is made of the learning benefits to the individual from participation. However, often the care taken over supporting learning in such settings is relatively limited. Far more time is spent in ensuring the organisation gets the most useful results for their project. Learning is at best seen as a happy by-product of the initiative and at worst as a time-consuming overhead that needs to be controlled in order not to interfere with the main task at hand.

In both cases the aspect that makes these initiatives significant and interesting from a learning perspective – a crowd of people with an array of different ideas, experiences and motivations coming together around a particular topic or problem – is largely being ignored or even designed out. This needs some attention, as universities have a responsibility to individuals outside academe – not just to provide any kind of open learning opportunities but also to provide the very best kinds of learning designs within such settings. Similarly, forms of citizen science should place equal attention on designing initiatives that lead to benefits for the individual and achieving outcomes for the organisation.

As both crowd-based forms are essentially about trying to support knowledge construction of various forms, it is surprising how little research or practice has drawn relationships between these two areas. Yet, at the very least both kinds of initiative have a responsibility to address specific issues of learning in the crowd – whether it is to engage with a topic of interest in the case of MOOCs or support a university project in the case of citizen science. This is not to say that all learning is now social, or we should ignore individual models of engagement with these platforms, but rather to stress that individual interactions with MOOC or citizen science content are not the only way that people learn.

The second key reason for paying attention to 'the crowd' is that for universities committed to global and open forms of education, interaction with different individuals from varied backgrounds may lead to a shift in interpretations and perspectives on educational content, and in so doing

potentially shift the power dynamics between academia and the citizen. Open education is an area that requires significant thought and critique. There is no space in this short editorial to do justice to this important topic (see instead Bayne, Knox, and Ross's (2015) special issue). Nevertheless, it is reasonable to argue that supporting the social construction of knowledge in MOOCs and reframing citizen science as a learning project could lead to benefits for the institutions concerned not only in quantitative terms of retention, satisfaction, widening participation, and (in the case of citizen science) productivity, but could also make an important qualitative difference in the nature of the research insights produced in citizen science projects, and a more meaningful engagement with a wider set of learners to develop open education initiatives that engage with 'global complexity' (Urry 2003).

As readers of Learning, Media and Technology know, enabling interaction in crowd-like settings to support learning is a non-trivial task. Structuring interaction and information sharing in ways that ensure all can participate, supporting a diversity of individuals that reflect the different ways and reasons that people are engaging with the platforms, and that account for varied educational backgrounds and digital inequalities, are just some of the factors that need to be considered to facilitate any kind of widening participation agenda and crowd-based interaction. Crowds are not the same as communities, classes or groups but, despite this, many of the well-established concepts and theories from previous research into online learning can be leveraged to inform practice. However, to-date, these ideas have been ignored in much of the literature and design of crowd-based phenomena for education. Instead, often the crowd is viewed as inherently capable of self-organising in highly problematic ways that lead to it being only well-educated people who have experience of Western, online education being able to participate fully and have their voices heard.

Despite the difficulties of supporting learning in a crowd, these challenges need to be addressed. Important here is changing the mindset, or overall goals of such initiatives from a focus on efficiency (e.g., minimising the cost/time of accomplishing a content creation or translation task in citizen science, or packaging of information in stylish ways that can be re-used at anytime in the case of MOOCs) to one of learning and knowledge construction. This can only be achieved with a real awareness (not set of assumptions) about why people want to be part of the initiative in the first place, and a perspective where the crowd is treated as a partner in the initiative, not an end-user or provider of labour, where individuals are motivated and rewarded through participation.

Crowd-based interactions online have emerged as an important way for people to connect around topics that are meaningful to them. Thus, thinking more critically about how best to support these initiatives in ways that explore power imbalances and ways to value the knowledge that can emerge from such interactions are important areas for future research. Such debates would be welcome in future editions of Learning, Media and Technology.

References

Bayne, S., J. Knox, and J. Ross. 2015. "Open Education: The Need for a Critical Approach." Learning, Media and Technology 40 (3): 247–250.

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