Chapter 6 A Crisis of Identity? Contradictions and New Opportunities



Abstract Drawing on the previous chapters, this chapter explores four tensions that characterise MOOCs. Although MOOCs are seen as an attempt to democratise education, they often privilege the elite, rather than acting as an equaliser. MOOCS are also considered a way to radically open access to education, yet they tend to offer education to people who are already able to learn rather than providing opportunities for everyone. While MOOCs are positioned as a disrupting force, often they replicate the customs and values associated with formal education, rather than unsettling educational norms. MOOCs are conceived as social networks that allow learners to learn through dialogue with others, yet many learners have limited interactions with others. Even when learners have the ability to learn autonomously, they often are expected to conform to course rules, rather than deciding their own learning strategies. These problems may be accentuated where MOOCs are viewed as a set of products (content and credentials) on sale to student consumers, rather than as a transformational educational experience for learners. The view of MOOCs as a product for the consumer learner may overly simplify the complex, transformational processes that underscore learning. Particularly where underlying automated systems try to improve progression by quantifying learners' behaviours and 'correcting' these to fit an 'ideal' learner profile or where algorithms and metrics are based on convectional education, rather than on future-facing forms of learning. This chapter examines these problems with MOOCs, offering promising future directions.

6.1 When Actions Contradict Aims

This book has exposed a number of inconsistencies that characterise MOOCs. These courses are viewed by educationalists as a form of democratisation and in Chap. 2 we examined whether and how MOOCs democratise the education landscape. Democracy is a levelling force that encourages equality. So it seems puzzling that, by foregrounding the norms and power structures of pre-eminent institutions and corporations, MOOCs might emphasise, rather than diminish, inequality. MOOCs are also considered a disruptive force, with the potential to challenge existing education models. Paradoxically, MOOCs sometimes reinforce conventions by requiring

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A. Littlejohn and N. Hood, *Reconceptualising Learning in the Digital Age*, SpringerBriefs in Open and Distance Education, https://doi.org/10.1007/978-981-10-8893-3_6

learners to conform to accepted 'ways of being', a phenomenon which was explored in Chap. 3. In Chap. 4, we interrogated how MOOCs accommodate massive numbers of learners and discovered that many learners learn on their own. We concluded that, rather than opening up education to everyone, MOOCs tend to create opportunities for people who are already able to learn. Chapter 5 signalled a need to rethink the metrics and measures that signal success. Retaining conventional metrics and measures may inadvertently create a new order between those who have control of course designs and data and learners, particularly where course designs are linked to data and analytics-based decisions. More worryingly, learners may be being exploited to achieve the economic and performance outcomes preferred by the providers of MOOCs, rather than being supported to achieve their own ideal outcomes.

These inconsistencies are apparent in other forms of open, online education, not only MOOCs, so the issues highlighted in this book likely affect many different areas of online education and lifelong learning. In this chapter, we further examine these issues, in relation to their broader social, political and economic contexts, to identify ways forward both for MOOCs and online education more generally. We focus specifically on the promise of MOOCs as a democratising force and as a means to disrupt and reorientate education. The success of MOOCs and future open, online learning is linked to the ability of learners to learn. Thus, we emphasise the importance of focusing attention on preparing learners to learn in a freeform manner in open and unstructured environments, over designing courses to support masses of learners to follow course pathways.

6.2 Restraining Elitism, Embracing Democracy

An asset of MOOCs that is underutilised is their unbounded geographical locations. Moving away from the idea of a geographically located institution that offers courses in a single, physical location means that learners and academics no longer have to be scholars in a single institution, allowing them to work across numerous academies and sites. These changes could disrupt the system of networking and cronyism that originated in social class systems and has pervaded the elite universities for centuries, maximising return for the members of these institutions. And indeed there have been examples of MOOCs breaking open the stronghold of elite institutions, either by identifying exceptional students who otherwise would not have applied to attend the universities or by offering for-credit courses or degree programmes. However, these continue to be the exception rather than the rule.

More commonly, rather than using MOOCs as a way to equalise, they are viewed as a way to offer organisations a global perspective. In the previous chapters, we illustrated how MOOCs can be used as networks of communication and control to strengthen and solidify the dominance of pre-eminent universities over larger and wider groups of people globally. MOOC platforms, with their non-geospatial location, allow universities and organisations to rescale their authority from the level of the institution to the level of 'the global'. MOOCs are being used in ways that support universities to build transnational identities that affords greater global reach, reinforcing their worldwide dominance. In this way, MOOCs amplify divisions between elite institutions and organisations other education providers, rather than filling the gaps. This expansion of 'global brands' feeds the corporate interests of the organisations that provide MOOCs—universities, industry and MOOC platform providers. However, there are ways to restrain elitism and provide democratic solutions.

There is a drive from Governments and Non-Governmental Organisations (NGOs) worldwide to focus on inclusion agendas, with a commitment to 'make all voices count' and 'leave no one behind'. This agenda is important for civil society effectiveness, particularly for building capacity in countries where diversity is increasing. While diversity is increasing in the US, Canada, Australia, New Zealand and the European Union, there is also migration to and within Africa, parts of Asia and South America. So, there is a need for globally responsive, democratic education spaces that bring people together in informal and relatively unstructured networks to engage critically with concepts, and work collectively to generate new knowledge.

Democratic spaces are important for groups of learners who are under-represented or undervalued by society. For example, migrants reorienting themselves in a new place of residence, minority groups seeking to advance their views or specialist communities who want to exchange and share their knowledge. The work of NGOs in supporting learning for these groups offers a blueprint for ways in which MOOCs could become democratic.

One example is Kiron, a non-governmental organisation based in Germany that works with refugees to help them learn how to live and work in the country. Kiron uses MOOCs as a platform from which to allow refugees to begin their study in their new country of residence, as illustrated in the case example.

Case Example: Supporting refugees' learning

Refugees need support in facing the challenges of fleeing from their home countries and starting over elsewhere. Yet, they have limited opportunities to begin or continue their studies or even to learn about the new culture and context where they are living. Kiron is an NGO that works with partner universities to offer MOOCs to refugees in camps in Germany (www.kiron.ngo). They use a combination of MOOC courses, online collaboration platforms and in-person learner support to help refugee learners. Each learner selects a cluster of MOOCs bundled into modules that form coherent educational programmes. Kiron negotiates recognition of prior learning with the partner universities, who can award up to 60 credits for completed Kiron modules using the European Credit Transfer and Accumulation System (ECTS). The MOOC-based study means that refugees can continue to learn even if they have to move geographically. After 2 years, Kiron students can apply to a partner university to complete the third and fourth year of study for a Bachelor's degree.

The case example from Kiron illustrates one-way MOOCs can be used as an equaliser to ease transition. Learning at a distance is helpful for people who are moving from one geographic location to another and the in-person learner support helps refugees not only to learn the academic subject but to orientate themselves in their new place of residence, supporting their development and helping them to become productive and participate equally within society.

In countries such as India, where the higher education system needs to be expanded rapidly, expansion of education largely is through private providers that tend to be confined to narrow professional tracks and are regulated through weak internal and state governance. In 2013, almost 90% of Indian colleges were rated as below average on quality parameters. MOOCs are viewed as a way to alleviate some of India's access and quality issues in higher education by enabling larger groups of people to have access to high quality learning. This expansion of education is particularly important for under-represented groups within Indian society. However, most MOOC participants in India are already well educated and live within the urban areas, reflecting learner trends from around the world. Expanding access requires MOOC providers to understand the needs of people in poorer, rural areas who have limited access to the internet and to technology devices that allow them to learn online. US-based MOOC provider edX has formed partnerships with Indian Institutions, including the Indian Institute of Technology in Bombay, to help them understand how they can provide MOOCs for under-represented groups in India. The British Council and the Open University is also working with Indian University Vice Chancellors to find solutions to expanding education in India. More examples like these of the use of MOOCs to equalise participation in society would help build the case for MOOCs as a democratising force worldwide, rather than as a form of control.

6.3 MOOCs as a Disrupting, not Reinforcing, Influence

MOOCs are configured to subvert the conventional social order of education (Siemens et al. 2010; Downes 2011). Yet, in some ways, they reinforce traditional patterns and behaviours in education. This effect is apparent from the earliest Connectivist MOOCs (cMOOCs) described in the previous chapters. The degree to which cMOOCs disrupt education, particularly their openness to different modes of behaviour, can be contested. They do not always allow for learner autonomy, as there is an expectation, by the MOOC facilitators and by some of the participants, that learners will adhere to prescribed 'norms' of behaviour. This issue is illustrated through a study of self-regulated learning in the Change11 MOOC (Milligan et al. 2013).

Change11 was a MOOC that took place over 35 weeks, from September 2011 to May 2012, with more than 2300 participants. The MOOC environment comprised an informal network with a variety of loosely connected digital platforms and tools including a registration portal, weekly online seminars and a range of blogs, tweets, videos and other materials from the instructors. A newsletter emailed daily to every

registered participant included course announcements, links to blog posts and tweets from the participants. A link to any social media post from a participant using the hashtag#change11 was included in the newsletter.

There were three types of participation in the MOOC: active, passive and invisible. Active participants created and shared knowledge as blogs, tweets or comments on other's postings, created as original thought pieces or as spontaneous responses to other people's ideas. One active participant described his engagement, commenting, "I have no idea how scattered I am across this MOOC, I have no idea how many contributions I've made, 30? 50? I've got a lot of replies ... I usually end a reply on an open end [to encourage a response]" (P05).

A 'passive' participant explained her reservations about engaging in the MOOC: "Sure, I can read other people's blogs and that's not a problem and I comment occasionally, but as far as really putting my ideas out there in the open in my own blog to be trampled on, you know there's a bit of fear there I think that I have and so that has been difficult for me" (P12). This reticence led to her being less visible to other participants. From a learning analytics perspective, she may have seemed less engaged than other participants. However, in her view, she was learning.

Invisible learners included participants who chose to drop in and out of the MOOC, observing what was happening within the network but not contributing directly. One participant described this behaviour as "hugely beneficial. Knowledge is filtered by the course organisers and has more value than something I randomly come across on the Internet" (P18). Some who were inactive within the Change11 network were discussing the course with other people offline, or engaging in 'closed' social media groups, on Facebook or other platforms. They learnt within small, circumspect groups instead of openly contributing ideas to the network. Change11 participants who were openly and actively contributing ideas to the network were frustrated with these seemingly inactive members. Nevertheless, both groups—those who openly posted ideas and those who worked in smaller, closed groups—were learning in ways that suited their personal needs.

At one level, the contribution of knowledge by different people is based on a democratic assemblage, where educational hierarchy is replaced by a flatter, more horizontal structure. However, there are concerns that active participants are being deprived of the insights from the invisible participants. Do all participants have a duty to contribute to the dialogue in a MOOC in ways that allow others to learn from their experiences? Is there a responsibility for every MOOC learner to be, at the same time, a MOOC teacher. For MOOCs to become democratic spaces should learners have the freedom to participate in a MOOC in the ways that are meaningful to them, rather than in ways stipulated by the tutors?

Ideally, everyone in the MOOC would have the confidence and ability to be able to put forward and test their own ideas and understanding. For passive participants, an inability to contribute knowledge could be considered a form of illiteracy that diminishes the democratic power of a MOOC. By never contributing, these participants are also not learning how to overcome that illiteracy. It could be argued that, to enable MOOCs as democratic spaces, effort should be put into ensuring everyone has the ability to contribute visibly. Equally, it could be contended that, in a democracy, everyone should be able to participate as they choose. And there is ample evidence to suggest passive participants are learning and gaining benefits.

Downes (2011) identified four important characteristics of cMOOCs—autonomy, diversity, openness and interactivity. However, autonomy and diversity in participation lead to tensions within the MOOC. Ideally in a cMOOC each learner is expected to contribute to the learning of other people through interactions and collective knowledge building activities. However, this expectation prevents some learners from autonomously learning outside the MOOC (Mackness et al. 2010). There is an expectation by the MOOC designers and some of the learners that participants will conform to the tacit 'norms' of the MOOC by behaving as visible and active participants. Thus, although notionally participant can learn autonomously in a MOOC, tensions may arise when learners use different forms of participation. In this way, MOOCs reinforce some of the norms of education.

The previous chapters delineated the considerable potential of MOOCs to disrupt education. However, MOOC innovations are being stifled in some ways by the culture and values that pervade education, such that MOOC innovations appear to be at the margins of formal education. However, these cultural values and norms are less apparent where MOOCs are used to support professional learning, or learning for work.

Professional learning is important in a world characterised by new forms labour (Billett 2004). Hardt and Negri (2009) describe this transformation as a shift from 'material labour', where manufactured products are created by a stable workforce, to 'immaterial labour', where the provision of new services and knowledge supersedes the production of material goods. Consequently, workplaces in many countries have moved from being structured around production models, to being characterised by flow of people, information and knowledge, which are fast, dynamic and disorderly. Information and knowledge is now available as digital resources, used as mediating artefacts or 'social objects' to connect people as they work (Engeström 2005; Knorr-Cetina 2001). It is the social interactions around MOOC resources that form a basis for new teaching models (Ferguson and Sharples 2014), rather than the availability of the MOOC itself.

Professional learning has been a growth area for MOOCs. Scenarios where MOOC learning is integrated within work practice, and where people learn through social, online interactions around their work activities, rather than in a standalone course, provide a learning model that is disrupting professional training. Coursera has been one of the first movers in this area, closely followed by edX and FutureLearn. There are also examples of courses for professionals (or people training to become a professional) that were offered independent of the mainstream MOOC platforms. These include the Midwifery MOOC described in the case example below.

Case Example: Integrating MOOC learning and work

The Evidence-Based Midwifery Practice MOOC aimed to support midwives, midwifery educators and other health professionals in clinical practice to develop knowledge of evidence-based practice (http://www. moocformidwives.com/). The course was designed and facilitated by professional midwives from the University of Aalborg in Denmark and the University of Technology Sydney in Australia. The MOOC ran over a 6-week period in April and May 2015 and attracted 2098 students from countries in Europe, Asia, America, Africa and Australasia. It was comprised of six modules populated with a range of learning resources, including video lectures and scientific articles (Dalsgaard and Littlejohn, in press). Regular, synchronous, online presentations were offered, and participants were expected to interact and share knowledge on midwifery practice in their geographic location through online, text-based forum discussions.

The MOOC created opportunities for professionals to integrate their work and learning. Each participant had to explain customary midwifery practices in their own country. They shared their viewpoints on distinctive forms of practice, and the likely consequences in different regional settings. Sharing practice examples was a good first step towards changing and improving practice. The MOOC is an example of a community of networked expertise identified by Hakkarainen et al. (2004), where professional learning is based around social interactions within a network.

In previous chapters, we described how access to resources alone is not sufficient for learning and expertise development, since learning requires active agency of the learner. Even the most promising structured online resources do not encapsulate the knowledge needed to support learning and development. The case example illustrates how the midwives learned not only by accessing online learning resources, but through social interactions and active exchange of knowledge.

The integrative pedagogies model for developing professional expertise identifies four types of knowledge needed for learning: (1) conceptual and theoretical knowledge based on facts and concepts; (2) procedural or practical knowledge which involves solving specialist, practical problems; and (3) sociocultural knowledge that enables people to operate within a given cultural context; and (4) the self-regulative knowledge needed to plan, perform and self-monitor development (Tynjälä et al. 2016). Formal education tends to focus on students learning conceptual and theoretical knowledge as well as procedural and practical knowledge. Over past decades, formal education has been expended to include opportunities to learn sociocultural and self-regulative knowledge. MOOCs can continue this trajectory when they serve as a focal point for the coordination of activities that support the development of all four types of knowledge. As learners gain expertise, there is a qualitative change in the way they use the resources in a MOOC to learn, moving from rule-based actions to fluid, self-directed activities (Dreyfus and Dreyfus 2005). To support learning of thee different types of knowledge, MOOCs have to be designed as participatory

spaces, rather than as a set of 'learning materials' and products in the conventional sense. However, there has to be tolerance of learners who choose to participate in different ways, as illustrated in the previous section.

Professional learning has been a growth area for MOOCs. The focus has been on providing MOOCs for companies and public organisations. For example, the UK's tax office, Her Majesty's Revenue and Customs (HMRC), offer MOOCs to employees as a form of regular professional development. There are many growth areas where MOOCs can aid professional learning. For example, combining work and learning, as illustrated in the case example illustrating how midwives around the world could share practice examples. Another potential growth area is the 'gigeconomy', companies such as Uber, Air B & B, and Mechanical Turk, where people are paid per task and need to learn on a just-in-time basis (Nickerson 2013). Gig economy workers could benefit, not only by using MOOC resources, but by participating in communities of networked expertise that could be associated with MOOCs. There is lots of scope for MOOCs to disrupt, rather than replicate, forms of online learning.

6.4 Opportunities for All: Supporting Self-regulation

MOOCs are positioned as a way for anyone, anywhere to access university education in ways that are 'equivalent to the on-campus experience'. The marketing documents from the MOOC providers claim MOOCs open up universities to students globally so they can become equal members of the academic community. This approach is particularly appealing for people who would like to study at an elite university, but have limited access to education. Nevertheless, there is a danger.

In Chap. 2, we described why learning online in a MOOC should not be viewed as being equivalent or comparable to on-campus learning. The view of a MOOC as being similar to a formal university 'course' places limitations on the benefits of MOOCs for students and for society. Learners could be liberated from having to follow a formal course pathway. And there are benefits for society when citizens can identify gaps in their knowledge and actively pursue ways to fill these gaps.

Learning in a MOOC is qualitatively different from learning face-to-face in a geographically based location and usually is not even equivalent to open, online learning at scale at an Open University. A critical aspect of learning on campus or at an open university is the support and feedback from tutors and peers, i.e. being a part of an academic community. Open University modules and degrees have high levels of support from tutors (academic support), and from student support teams (pastoral and other support), which have been termed 'supported open learning'. Most universities offer tutor-based support and, crucially, students learn within a community of scholars and peers. This form of support is missing or is truncated in a MOOC.

To participate effectively in a MOOC, learners have to engage actively (although not always collaborative). Chapter 4 provided ample evidence that not all learners are able (or want) to do this. Many do not have the cognitive, behavioural or affective characteristics necessary to be active agents determining their own learning pathways (Illeris 2007; Littlejohn et al. 2016). It seems MOOCs privilege those who are able to plan, perform and self-regulate their learning. There is a danger that the expansion of MOOCs inadvertently will lead to a form of discrimination, where those who are unable or unwilling to direct their own learning will not have access to the teaching support they require.

This disparity allows those who are able to self-regulate to overly influence what is happening and what is being learned in the MOOC (Milligan et al. 2013). It illustrates the 'inequalities of participation' Selwyn (2016, p. 31) warns of, where the experiences and outcomes of participating in learning will differ considerably depending on who the person is. If MOOCs are to be part of the shift towards 'learnification', where lifelong learners decide what, when and where they will learn, a critical element that has to be taken into consideration is the ability of learners to learn autonomously.

The ability to learn autonomously should be viewed as a critical literacy in a world where open, online, learning is becoming significant. In the past, governments have focused on critical literacies as a foundation of democracy and engagement in society and should similarly take action ensure all citizens are able to self-regulate their own learning in unstructured, online settings. There are a number of competency frameworks that guide education (see for example Voogt and Roblin 2012). Some frameworks emphasise self-regulation as a critical literacy. The expansion of MOOCs and other forms of open, online education means that self-regulation will increase in importance as a critical literacy. Otherwise, MOOCs and open, online education will serve to exacerbate, rather than alleviate, the equity issues in education.

One problem is that providing opportunities for learners to develop self-regulation ability can be complex and expensive. This is a particularly troublesome issue where MOOCs are seen as a cost-effective way to educate the masses. However, online learning should be valued for the unique ways it can support self-regulation through social interactions (Nicol and Macfarlaine-Dick 2006). MOOCs could liberate learning by encouraging learners to self-determine their learning pathway, while supporting self-regulation. Therefore, it is crucial to move away from the narrow focus on course provision and data-driven support towards preparing learners to be able to set and follow their own ambitions in unstructured open, online environments.

6.5 Rethinking Success Measures

The introduction of MOOCs has been associated with forms of economic growth. MOOCs may be viewed as a product that can be sold to student consumers. MOOCs can also be considered a new form of 'migration', allowing people to study for degrees in western universities, retaining the currency of a 'western degree' as superior to degrees from other countries, rather than supporting the improvement of universities around the world. Universities and businesses increasingly see MOOCs as part of a new currency at the heart of generating income streams, where students buy resources and qualifications. This may explain to some extent why MOOCs reinforce the idea of trading educational resources and formal, undergraduate education, rather than as a way to support societal learning in radically new ways. Tracing the evolving business model that supports the MOOC platform provider FutureLearn exemplifies these issues.

When the FutureLearn MOOC platform was introduced in 2012, it was based on a 'freemium' model. The aim was to increase interest in the partner universities by offering MOOCs as a taster and first step towards paid-for education. Although it is clear that a well-designed MOOC can reinforce the value of a university's 'brand', the monetary benefits from follow-through registration are difficult to calculate, and good return on investment is difficult to achieve. It is challenging to identify the number of students who register and pay for a course after experiencing a MOOC for free, since some of them may already have intended to study. The FutureLearn business model is evolving. Along with partner universities Deakin (Australia) and Coventry (UK), FutureLearn is currently experimenting with a new business model that allows students to try taster courses for free, then register for MOOC-style university degree programmes, as illustrated in the case example below:

Case Example: MOOCs as Deakin University Degrees

Deakin University in Australia is offering bachelor degrees on the Future-Learn platform. Students can begin their study by participating in short 'taster' courses that are free of charge, before enrolling in the Bachelors programme for a fee. The credits from the MOOC course go towards the degree. The programme is comprised of sequences, short MOOCs with assessments at the end of each course. FutureLearn describes this experience as 'the equivalent of a university subject'. Degrees are available in a range of subjects including Cyber Security, Information Technology, Financial Planning, Humanitarian and Development Action, Property and Diabetes Education. Deakin and FutureLearn are not the first to offer MOOC-based degrees. Coursera, edX and Udacity have all hosted Master's level offerings. These degree-based MOOCs have allowed universities and platform providers to experiment with revenue generation and expand MOOC business models to include new business lines.

The perspective of a MOOC as a retail commodity available on demand to customers does not take into consideration what is lost when learning solely is online, in particular the role of in-person, social interaction with tutors and peers. There are also ethical implications, especially transparency around what is being 'sold' to students. Organisations need to be clear that the online learning experiences are not equivalent to on-campus learning in terms of the qualitative experience.

It is not only the learners who need to understand what MOOCs do and do not offer, employers also need to be made aware of what the new 'currency' of MOOC qualifications and 'micro-credentialing' signal. These achievements could be merely a reinforcement and replication of traditional education; on the other hand, these new forms of credentialing could be implemented in ways that are more democratic and radically different from conventional education.

This view of MOOCs run the risk of narrowly focusing on success measures that are based around the learner's progress through a course—measures of progression, retention, assessment scores and time in a digital learning platform. These measures might not align with the learner's intentions, especially if he or she wants to learn a concept then leave the course. There is a danger that 'automated detectors of affect with nudges to promote growth mindset' may result in attempts to quantify learners' emotions and correct these to fit the 'ideal' psychological character. Numbers sometimes give an illusion of confidence, power and authority, whether their measures are representative of complex learning situations or not.

Broader signifiers of success are being explored in the literature, such as learner agency and the ability of learners to self-regulate their own learning. New analysis techniques are being developed to examine whether and how participants learn in online forums (Gillani and Eynon 2014), how they interact with intelligent tutoring systems (Wen et al. 2014), their self-regulation patterns (Siadaty et al. 2012) and their confidence and emotions (Dillon et al. 2016). The data from these analytics techniques allow the development of automated scaffolds and prompts. However, even these broad signifiers should be considered carefully because of complications in assessing whether a scaffold supports better learning, since not every student wants to reach the same endpoint. It is also difficult to pinpoint which factors actually are influencing learning processes. Therefore, we have to be careful about the assumptions that underpin Artificial Intelligence (AI) and data-driven systems. Currently, AI systems cannot assess learner progress at a level that is comparable with a human. Therefore, a combination of automatic measurement and analysis along with selfreport and learner decision-making provides a possible way forward, though learners need to have the ability to make decisions about their own learning based on these multimodal data. Therefore, there are two future areas for the development of dataanalytics for MOOCs. First, we have to understand when are the critical moments when scaffolding can help learners. But at the same time we must also make sure learners have the decision-making skills to be able to use and act on analytics scaffolds. It is the human-computer interface that will make the biggest difference in the effectiveness of MOOCs to support learners in achieving their goals.

6.6 Concluding Thoughts

This book has traced contradictions associated with the expansion of MOOCs. In reconceptualising education as open, online learning, it is necessary to question not only what new educational models are being implemented, but also why these models, tools and processes are being introduced; how they will contribute to improvements in practice; and how they will create enhanced opportunities and outcomes for all

learners. To fully understand these questions, it is necessary to look beyond MOOCs themselves to explore the contexts that are shaping and informing their development and design.

The democratising vision of MOOCs relates to Hardt and Negri's (2005) concept of 'the multitude', where large numbers of people self-organise within a network to generate and share 'common knowledge' in ways that create conditions to reduce oppressive forms of power. While an alluring idea, the evidence suggests that MOOCs typically favour the educated elite, and that the democratising vision belies the 'inequalities of participation' (Selwyn 2016, p. 31), and substantial variation in the experiences and outcomes of individual learners. That is, MOOCs, and online education more generally, struggles with the same issues of equity that 'traditional' education does.

Even when learners have the ability to learn autonomously, course designers and researchers too often expect learners to conform to the course norms and specific behaviour (for example, completing a course or being 'visible'). The systems underpinning MOOCs continue to present a singular, top-down perspective of learning. Rather than emancipating the learner to follow a self-determined pathway, the reliance on analytics-based scaffolds often subjugate learners into compliance rather than supporting them to follow their own paths. However, despite the above pessimism, this book has identified examples of particular MOOCs that have served to breakthrough some of the inequities facing education, for instance, for migrant or refugee learners, or in brokering professional connections between midwives in Europe and in Africa. These successes perhaps indicate that when utilised in particular contexts, for particular purposes and with particular populations, MOOCs do have the potential to fulfil some of their original promise.

There, however, remains a risk that rather than offering a fresh, democratic approach to education, MOOCs reproduce the tacit forms of control that underpin education systems. At the same time, MOOCs also sustain the traditional hierarchy within which the novice learner is subjugated to expert 'teachers' who work in a variety of roles: subject matter experts, course designers, data analysts and those who create educational platforms and tools. There is a need to rethink ways MOOCs and other forms of open, online learning can extend education not only within the narrow boundaries of formal education, but beyond these frontiers, in areas of informal, professional, networked community-based learning. Again, there are nascent examples of these types of opportunities becoming available. Perhaps most promising are the informal, self-organising groups and participatory learning opportunities that would not be termed MOOCs but provide interesting case studies to understand how access can be opened and learning becomes a more reciprocal process distributed across users. In these instances, the open, distributed and collaborative possibilities offered by the Internet are leveraged without the influence of formal or traditional institutional structures.

Open, online learning has the potential to extend across every part of a learner's life. So, rather than focusing narrowly on how each learner fits within online education, we must consider how this reconceptualisation of learning fits within each learner's lifecycle. Rather than concentrating on offering materials, courses and ser-

vices to the consumer student, we should take steps to ensure every learner has equal opportunities to learn from and contribute to new emerging forms of open, online learning. The ideas behind the 'personalization' movement in the compulsory sector apply to MOOCs and other forms of online education. More problematic perhaps, is that increasing evidence suggests that what makes personalization most successful in schooling contexts is the presence of strong relational support networks to support the student/learner through their learning journey.

These observations have a broader resonance with education in general, as MOOCs become synonymous with almost any type of online learning. It is clear that education systems, in their traditional forms, are not structured to facilitate the range of learning opportunities that are required in the twenty-first century. MOOCs, and open online learning in general, are providing exciting new models of learning. However, as this book has explored, while these models create new opportunities, in many cases they simply are reinforcing traditional educational models and outdated hierarchies in education. It is vital to reconceptualise learning in the digital age to harness the democratising potential of MOOCs.

Acknowledgements The authors wish to thank Vicky Murphy of The Open University for comments and for proofing this chapter.

References

- Billett, S. (2004). Workplace participatory practices: Conceptualising workplaces as learning environments. *Journal of Workplace Learning*, 16(6), 312–324.
- Dillon, J., Bosch, N., Chetlur, M., Wanigasekara, N., Ambrose, G. A., Sengupta, B., & D'Mello, S. K. (2016). Student emotion, co-occurrence, and dropout in a MOOC context. In *EDM* (pp. 353–357).
- Downes, S. (2011). The MOOC guide. Retrieved from https://sites.google.com/site/themoocguide/ home.
- Dreyfus, H. L., & Dreyfus, S. E. (2005). Peripheral vision: Expertise in real world contexts. Organization Studies, 26(5), 779–792.
- Engeström, Y. (2005). *Developmental work research: Expanding activity theory in practice* (Vol. 12). Berlin, Germany: Lehmanns Media.
- Ferguson, R., & Sharples, M. (2014, September 16–19). Innovative pedagogy at massive scale: Teaching and learning in MOOCs. In C. Rensing, S. de Freitas, T. Ley, & P. J. Muñoz-Merino (Eds.), *Open learning and teaching in educational communities*. Paper presented at 9th European Conference on Technology Enhanced Learning, Graz, Austria (pp. 98–111). Cham, Germany: Springer.
- Gillani, N., & Eynon, R. (2014). Communication patterns in massively open online courses. *The Internet and Higher Education*, 23, 18–26.
- Hakkarainen, K. P., Palonen, T., Paavola, S., & Lehtinen, E. (2004). Communities of networked expertise: Professional and educational perspectives.
- Hardt, M., & Negri, A. (2005). *Multitude: War and democracy in the age of empire*. New York, NY: Penguin.
- Hardt, M., & Negri, A. (2009). Commonwealth. Boston, MA: Harvard University Press.
- Illeris, K. (2007). *How we learn: Learning and non-learning in school and beyond*. London, UK: Routledge.

- Knorr-Cetina, K. K. (2001). Postsocial relations: Theorizing sociality in a postsocial environment. In B. Smart & G. Ritzer (Eds.), *Handbook of social theory* (pp. 520–537). London, UK: Sage Publications.
- 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.
- Mackness, J., Mak, S., & Williams, R. (2010, May 3–4). The ideals and reality of participating in a MOOC. In *Proceedings of the 7th International Conference on Networked Learning 2010*, (pp. 266–275). Lancaster: University of Lancaster.
- Milligan, C., Littlejohn, A., & Margaryan, A. (2013). Patterns of engagement in connectivist MOOCs. *Journal of Online Learning and Teaching*, 9(2), 149.
- Nickerson, J. (2013). Crowd Work and Collective Learning. In A. Littlejohn & A. Margaryan (Eds.), *Technology-enhanced Professional Learning* (pp. 39–50). Routledge: NY.
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218.
- Selwyn, N. (2016). Is technology good for education. Cambridge, UK: Polity Books.
- Siadaty, M., Gasevic, D., Jovanovic, J., Pata, K., Milikic, N., Holocher-Ertl, T., ... & Hatala, M. (2012). Self-regulated workplace learning: A pedagogical framework and semantic web-based environment. *Journal of Educational Technology & Society*, 15(4), 75.
- Siemens, G., Downes, S., Cormier, D., & Kop, R. (2010). PLENK 2010–Personal learning environments, networks and knowledge. Retrieved from http://connect.downes.ca/.
- Tynjälä, P., Virtanen, A., Klemola, U., Kostiainen, E., & Rasku-Puttonen, H. (2016). Developing social competence and other generic skills in teacher education: Applying the model of integrative pedagogy. *European Journal of Teacher Education*, 39(3), 368–387.
- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*, 44(3), 299–321.
- Wen, M., Yang, D., & Rose, C. (2014, July). Sentiment analysis in MOOC discussion forums: What does it tell us? In *Educational Data Mining 2014*.