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MOOCs and open education around the world

Massive Open Online Courses (MOOCs) have emerged in recent years as a disruptive technology and have generated considerable debate. This edited collection provides a vital update on the field from key researchers in the area.

In the first forward to the book, George Siemens (one of the founders of the first MOOCs CCK08) describes the hype behind the emergence of MOOCs and the ways in which they are challenging traditional educational offerings. However, he also argues that the hype has not been realised as data revealed the high dropout rates, limited student interactions and a reliance on instructional teaching methods. Despite this he concludes that the long heralded learning revolution is at the doorstep.

In the second forward, Fred Muller, provides a useful history of the concept of open education and online education. He introduces an open education model, which consists of the following five components: educational resources, learning services, teaching efforts, learners’ needs, and employability and capabilities development.

In the preface for the book, the editors argue that there is a need to better understand how educational innovations like MOOCs and OERs are being implemented. The book is divided into eight sections and has 29 chapters.

The first part of the book provides a historical perspective and critical reflection on the emergence of MOOCs and open education. In the first chapter, David Wiley, critiques the damage done by MOOCs to the idea of ‘open’. He argues that openness facilitates the unexpected and states that open should be about: retain the right to make, own and control copies, reuse, revise, remix and redistribute. He advocates for an open educational infrastructure of: open credentials, open assessment, open educational resources and open competencies. Karen Head raises concerns about the design and delivery of MOOCs, and argues that we need to think about more than content and delivery, towards MOOCs, which are more diverse and inclusive. In the third chapter, Kumiko Aoki describes the historical developments of distance and online education in Japan from social and cultural perspectives.

The second part of the book discussing opportunities associated with open education – now and on the horizon. Gerald Hanley describes arguably one of the first OER repositories, MERLOT. He argues that MOOCs and open education can be used to address a number of Higher Education needs without radically disrupting the ecosystem, such as reducing the cost of institutional content, supporting outreach and college readiness, determining acceptance of transferable courses, reducing the cost of workforce development certificate programs, and providing credit for prior learning by exam. Bossu et al. describe an Australian project ‘Adoption, use and management of Open Educational Resources to enhance teaching and learning in Australia’. The project documented the current state of play of OER in Australia. The following benefits of OER were noted: they have the potential to increase collaboration, they are well aligned with academic practices of sharing and dissemination of knowledge, educators can save time and avoid duplication of effort, they can improve the quality of educational materials, and they can help enhance the quality of teaching and learning. They conclude by describing a feasibility model around the opportunities involved with the adoption of OER; the factors related to the challenges associated with the adoption of OER; the strategic directions which need to be considered for effective adoption of OER; and

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policy recommendations for Higher Education institutions. Czemiewicz et al. describe open education work at the university of Cape Town in Chapter 6. They describe how the various open education initiatives have resulted in an open access policy that supports open education broadly, along with the mainstreaming of OER and promotion of open scholarship.

Part three focuses on researching and evaluating notions of MOOCs and openness. In Chapter 7 Deimann et al. address the question ‘What can MOOCs learn from distance education?’ They compare data from two MOOCs and one distance education course noting that attrition rates were much higher in the MOOCs. They conclude by advocating that MOOCs can learn much from distance education in terms of design and delivery. Hartnett et al. describe the use of the Open2Study platform to design and deliver a MOOC at Massey University. Three MOOCs were evaluated. Key findings included: issues around workload and time, the need for strategic oversight, application of the knowledge gained from being involved in the MOOC initiative to their teaching on university courses, and the need for appropriate professional development and support. Haywood et al. in Chapter 9 provides a reflection on an earlier MOOC provider, the University of Edinburgh. They cite the following as reasons for being involved in MOOC development: new experiences for experienced online teachers and rethinking online pedagogies, opportunities for less experienced online teachers, sparking a debate about digital education, undertaking MOOC research, enhanced international collaboration, impact on student recruitment, and enhancing the university’s reputation for innovation in learning and teaching.

Part four looks at quality and MOOCs and OERs. In Chapter 10 Karen Swan et al. describe a tool for characterizing the pedagogical approaches of MOOCs. The AMP (Assessing MOOC Pedagogies) tool is based on ten dimensions: epistemology, the role of the teacher, focus of activities, cooperative learning, the accommodation of individual differences, user role, structure, the approach to content, feedback and activities/assessment. Mishra and Kanwar in Chapter 11 consider quality assurance issues for open educational resources. They describe a framework for quality assurance from the Commonwealth of Learning (COL) called TIPS, which consists of four dimensions: teaching and learning, information and content, presentation and technology. They caution that this framework should be used flexibly by teachers and learners based on their different needs and perspectives. In Chapter 12 Mulder and Jansen describe a pan-European MOOC initiative, Openped. There are eight common features of the Openped MOOCs: openness to learners, digital openness, learner-centred approach, independent learning, media-supported interaction, recognition options, quality focus and spectrum of diversity.

Part five looks at designing innovative courses, programs and models of instruction. DeMillo in Chapter 13 focuses on the unbundling of many of the costs of Higher Education, via a master’s degree in computer science based on free delivery using MOOCs. In Chapter 14 Kim and Chung describe their involvement in a highly interesting and cutting-edge MOOC ‘Designing a new learning environment’. They were interested in how MOOCs could: identify innovative future education leaders globally, achieve the critical mass to boost the number of innovative ideas, and provide training experiences for educators at scale. In Chapter 15 Severance considers the activity data associated with MOOCs and recounts his experience of being involved in a range of Coursera MOOCs and in particular participants perceptions of MOOCs. Robin and McNeil discuss the collaborative design and development of MOOCs for teacher professional development in Chapter 16. They describe how they used a Webscape model for course design and development, which consists of five components: students’/faculty and content experts working collaboratively to design and develop multimedia educational projects, use of a range of tools and resources, creation of a real educational projects, a constructivist team-based approach to design, and an extended timeline for development. Behmann et al. describe the creation of a Distributed Open Collaborative Course (DOCC) underpinned by feminist pedagogies.

Part six of the book focuses on MOOCs and open education in the developing world, an important topic given the aspiration of MOOCs to enable social inclusion. In Chapter 18 Venkataraman and Kanwar explore the use of MOOCs in developing countries, focusing on the design and delivery of the COL-IITK MOOC on mobile development. Evaluation of the MOOC indicated that there was high student satisfaction with the instructors, course content, resources and delivery format. Jagannathan describes a MOOC on promoting global prosperity and eradication of poverty in Chapter 19. Chapter 20 is entitled ‘The globalization of MOOCs in south-east asia, focusing in particular on Malaysia and Indonesia. Chapter 21 is a case study of MOOCs in the Philippines, where a quality assurance for open and distance learning framework was used. This consists of the following elements: institutional support, teaching, support staff and the learning environment, evaluation, and assessment. OER and MOOCs in Africa are discussed in Chapter 22, with a particular focus on the challenges faced in terms of using digital technologies.

The work of the African Virtual University is described.

Part seven focuses on MOOCs in corporate settings, an important focus as little has been researched or described on this. Chapter 23 explores the concept of open in a corporate setting, arguably a term at odds with the profit driven motives of corporations. The ALLISON online learning community is described in Chapter 24, where the focus is facilitating workplace knowledge and skills development. Chapter 25 looks at the use of MOOCs as vehicles for training, information, collaboration and public discussion in a corporate setting. It describes the work that the Center for Online Learning, Research and Service (COLRS) is
doing in this area. The authors conclude that companies see MOOCs as a way to decrease costs and increase the relevance and availability of employee training.

The final section of the book, part eight, looks to the future in terms of open practices. It begins with Chapter 26, which focuses on the use of MOOCs for the development of knowledge, skills and attitudes needed to help participants navigate the ‘chaos’ of an ambiguous learning landscape. Keppell argues that there are six things that need to be developed to achieve this: digital literacies, seamless learning, self-regulated learning, learning orientation and assessment, lifelong learning, and flexible learning pathways. Kop and Fourier, in Chapter 27, explore how MOOCs can be used to support the knowledge commons, where the term knowledge commons refers to information, data, and content that is collectively owned and managed by a community of users, particularly over the Internet. In Chapter 28, Ferguson, Sharples and Beale, look forward to the future of massive online learning, drawing on their experience of being involved with the FutureLearn MOOC platform. They argue that in order for MOOCs to flourish in the future there is a need for changes in pedagogy, technology the wider learning environment. In the final chapter, Chapter 29, the editors reflect on the book contributions and draw out key themes, which emerge from across the chapters. These include the fact that MOOCs are here to stay, that MOOCs are part of the strategies institutions adopt for addressing key challenges facing education, and that evaluating and understanding MOOC practise helps use frame and extend the notion of openness.

This is an authoritative up to date summary of MOOC research written by key experts in the field, describing a rich set of case studies across different sectors, areas and disciplines. The book is well structured and balanced and the concluding chapter provides a nice summary of the key themes. One thing that I would have liked to see more of is a focus on the assessment issues associated with MOOCs and how recognition can be provided for non-formal and informal learning.
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