[Book Review] Authentic learning for the digital generation: raising the potential of technology in the classroom

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BOOK AND EBOOK REVIEW

Book Reviews

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The following publication contains book reviews of these titles:


Keywords: MOOCs; humanism; posthumanism; colonial agenda; discrimination; exclusion; Social media; digital identity; digital learning; computers; schools; UK; young children


This collection of twelve research-based chapters explores young children’s engagements with digital technologies in educational settings and homes in different countries. It is a welcome addition to our understanding of the ever-changing landscape of the learning lives of adults (as parents and practitioners) and children in the twenty first century. Readers of the collection learn of a range of educational initiatives and observations including uses of photography, blogging, internet cognition and digital story making in contexts such as the UK, Germany, Canada, Australia, the USA, Sweden and Norway. Debates surrounding digital technologies and young children are addressed and issues such as the potential impacts of practitioners’ and parents’ practices and beliefs on children’s play and learning are explored.

The editors of the collection state that early childhood education has a role to play in supporting children in developing the digital skills they will need throughout their lives. They also note, however, that there is great diversity in provision for young children in relation to digital technologies and that this can be explained, in part, through conceptualisations of technologies which place it as “separate” from other aspects of early childhood provision such as play. Against this contextual background, which is distinctive to the early childhood education sector, the editors have assembled a collection of detailed case studies depicting creative uses of technologies by children and adults. These factors suggest that this book has much to offer to all readers with an interest in the design and use of digital technologies for learning with young children, as well as teachers and practitioners, which is perhaps the main readership targeted by the writers.

The two areas in focus in this book are both subject to heated and polarised debate, that is, technologies and childhood; Greenfield (2004, 2015) has written, with the intention to, in her words, incite debate, about the potentially negative effects technologies are having on human minds, both adults’ and children’s minds. In parallel, movements, such as the UK-based Save Childhood Movement (http://www.savechildhood.net/) are campaigning to protect children’s rights and experiences from policymaking which emphasises early and formal experiences of education over more play-based and child-led approaches to early education and
development. Both of these debated areas come together as well in work such as that of Sue Palmer (2008, 2015) who calls for a detoxification of childhood, which, amongst other recommendations, includes a call to detoxify children’s electronic worlds. Needless to say, each of these propositions which, in this author’s mind can be categorised as: (a) that technologies are changing humans’ minds, in potentially negative ways, (b) that childhood is being diminished by policymaking which de-prioritises child-led experiences and children’s rights and (c) that technologies in childhood are damaging and need controlling, is contested in public and academic spheres and in this volume we find a balanced view of what positive childhood experiences with technologies might be like and what conditions need to pertain for this to happen.

Chapter twelve, authored by McLean and Edwards, has as its title “Beginning the conversation: how learning with digital technology is conceptualised in contemporary times”. It serves as a useful umbrella concept for the whole book, in that it states that we are still in the early stages of defining what positive learning experiences involving technologies should be like and how they can be put in place. One aspect of “beginning the conversation” could be seen as identifying how practitioners and researchers might conceptualise learning with digital technologies. In chapter 2, Burnett and Daniels write about whether technologies are to be seen as modes of delivering literacy or whether they can support an expanded view of literacy so that “literacy” can accommodate multimodal texts with visuals, sounds as well as writing. The question of how learning with digital technology is conceptualised in research with young children is problematized by Burnett and Daniels as they observe that much prior research has used an experimental design. The consequence of this choice is that the research evidence only reports on “the impact of specific tools on specific aspects of literacy learning” (Burnett and Daniels 2016: 20). The authors, in contrast, suggest that more open-ended research (which they review) allows for observation of children’s digital meaning making and this allows for areas such as embodiment to be more effectively understood.

Each of the chapters in this collection provides similarly detailed insight through interactional or visual data into children’s engagements with technologies. It is perhaps to be predicted that three of these have a literacy or literacies focus (chapter 2 discussed above, chapter 3 on young children’s narratives, and chapter 7 on story-making), although other areas of early years curricula are also explored: mathematics and the learning of 2D and 3D shapes using tablets and traditional tactile shapes (chapter 6), understanding the learning environment through photography (chapter 5) and blogging with peers beyond ‘classroom’ walls (chapter 8). Chapter 4 tackles the issues surrounding children’s “internet cognition” and how internet safety can be woven into young children’s early engagements with technologies. In a similar vein on appropriate uses for technologies, chapter 1 explores uses of email to guide children in their digital social interactions.

Several of the studies take a sociocultural perspective on learning (see e.g. Daniels, 2008) and as such the mediating role played by adults (parents or practitioners) is an important discussion point throughout the book. Chapter 9 reports on practitioners’ attitudes towards technologies in kindergartens in two federal states in Germany. Findings pointed in some cases to a lack of certainty on the part of practitioners, possibly emanating from published guidelines not giving much attention to a role for digital technologies. Other cases suggested a sense of alienation amongst practitioners from the idea of integrating technologies into daily practice with young children. The recommendations from the authors are that in this context more attention should be paid to the needs of trainee teachers and the continuing development of those working with young children once they have qualified.

Parents are also seen as influential figures in children’s learning and development, both in terms of digital technologies and all other aspects of learning. Chapter 12 uses the opportunities provided by playgroups where children, their parents or carers and playgroup facilitators meet to explore how shared understandings of the potential for digital technologies in learning can begin. The authors propose that a focus on home settings is important given that children exist in the worlds of home and the early years setting and the uses of technologies in both will be influencing them. For parents, carers and playgroup facilitators to have a sound understanding of children’s digital experiences it is argued that space needs to be made for these “important conversations” (McLean and Edwards 2016: 156). Within these spaces, the writers found that parents or carers could share their perspectives of, for example, choosing not to encourage or allow their children to integrate using tablets into their play, opening up possibilities for exploring such positions.

To conclude, this book makes a rich contribution to this rapidly developing and yet under-explored area and provides a cool-headed look at issues which can generate debate among parents and carers, educational practitioners or policymakers. In keeping with the research focus of the collection, each chapter provides ideas for where future research is needed in addition to offering insights to readers on how each study approached data gathering and analysis in the context of research with young children and digital technologies. As well as becoming informed about the studies and discussions reported in this book, there is much to be taken away for readers who may be planning their research and developing new meanings of their own.


In 2017, humans live in a world where we have apparently, boundary-less routes to learning and interacting, in multiple and overlapping social online environments. This text presents a wide range of theoretical and empirical investigations that offer both: a lens back to the early 2010s; and, also the opportunity to reflect on the inevitably amorphous nature of our own digital identities as we read. It provides
a rich selection of perspectives on the multitudes and multifacilities of digital identities and personas all participants (from football fans, to humans-who-seek-sex-with-humans) create in this evolving landscape, and also questions how this will continue to construct and constitute learners, educators and policy makers.

The Foreword presented by Margaret J. Cox (Professor of Information Technology in Education, King’s College London) identifies this being a ‘rapidly changing world’ (p. xiv) and we noticed – as you would do – the date of the publication is 2013. Many of the chapters also refer to studies undertaken as far back as 2004. As we approached them, we took the possible impact of the years that have since passed into consideration, but the focus of the review is to be on the applicability of the discussions for educators now. Throughout the book authors made meaning from the digital world in different ways and the key terms and definitions listed at the end of each chapter were essential. Overall, there was a welcome move away from the traditional discourse focusing on technology and e-learning to a human focus; considering self, identity, multifaceted identities and communities.

Section one focuses on digital identity and the authors grapple with various understandings and definitions. A core theme in this section is the link between a real-world identity and an online identity and how these lines are negotiated, blurred, and re-negotiated. Authors explore how digital identities are formed and performed, and offer a typology of these, considering also the uses of each. Indeed, only this week at our University, we were advised to create a particular type of cohesive and professionalised/academic visibility for ourselves via Twitter.

A strong emphasis in this section is the notion of agency and how we can creatively, within context, make choices about our presentations of self. Remembering obviously, that these processes are inherently social and thus the identity of the individual is inextricably linked to the formation of communities. Indeed, it is likely that strong digital identities can only be formed via interaction within co-operative relationships with others. Consequently, we regulate our behaviour contextually, and with intention and choice too. These insights may appear superficially common-sensical. However, they are probably not. It is only through reading this text, that we have now re-visited, and thought through in more depth, the complexities of (for example) the digital dialogue and dialectical relationships. These latter should be core to the practice of educators (us) who aim to design effective learning environments that facilitate learners to focus on self, and then create identities and relationships that foster learning.

In the second section, the authors explore implications of social media use on the idea of the self in relation to community and presentation of self. They do this by covering areas such as risk, reputation and various practices. In Chapter 6, Pitsillides, Walter and Fairfax consider digital death and identity within social media; this is an interesting discussion reflecting on identity in relation to a whole life cycle, rather than just a focus on when an identity is ‘born’ in social media. This section also focuses much on reputation, including the idea of playing to an audience, and determining which character one wants our digital identity to be.

In addition, other authors attempt to use agency (in a collective virtual experiment) and explore Foucauldian and Butlerian performances of gender roles and concepts of sexuality in an attempt to demonstrate how some people have created a nexus of power relations within which they may be able to resist and deconstruct the categorisations of sexuality previously imposed upon them (Chapter 9, Kreps). Identity in social media has moved from a secluded, select audience to a wider public audience and this impacts on personal reputation in many ways (Chapter 10, Paulwel). Although not obviously of relevance to educators, such readings make us think about how we begin, facilitate and end online relationships, and also how we can provide opportunities for an un-fettered creativity and community that facilitates a liberated form of learning and growth.

Finally, the third section explores further the interfaces of virtual environments and how they can be designed to be inclusive and welcoming. Warburton (Chapter 11), encourages the design of space for lurkers, a chapter that balances well against others which make the unwritten assumption that everyone can be made to – and probably wants to – participate in an online social world. This chapter also explores how individuals create their digital identities, how they can be supported and where, as facilitators of this, educators should strive to ensure there is no unconscious bias in the design or delivery process. A few chapters directly state how the authors’ work could be considered by educators and it would have been helpful to us if this approach had been used more widely throughout.

Due to the timing of the publication, numerous chapters refer to ‘future research’ as the authors reflected on newly presented theoretical models, or studies, recognising the changing social media climate. An addendum update from these authors would have been particularly useful, as for some the studies were seven years before the publication. We feel stimulated to explore and find out if particular authors have undertaken further research within current contexts.

Social media and identity has changed and evolved rapidly in the years since this book was published, and original studies undertaken. Some authors, make bold statements which now seem out of place. In addition, the focus on text as a medium in social media is dated, as many current top sites are image and video based (e.g. Instagram, Snapchat). There is a gap in the narrative around synchronous communication, and the exploration of identities does not sufficiently un-tangle the simultaneous, multiple personas individuals now have where a professional online persona, in the designated space (LinkedIn) is just as important as a personal persona in the otherwise designated space (Facebook).

However, this text offers a multi-faceted, but grounded, historical mirror on identity and social media. It is one tool we could use now, in this Twitter and Trump world. Here a real-world power holder and virtual persona,
seemingly (using a form of motivated reasoning) simultaneously, presents himself daily as both victim and authoritarian; as both subject to the more powerful forces generated by other media identities and communities, while seemingly able to denigrate and deconstruct them. Overall, this is a text we would recommend to all educators, who have an interest in digital and human identities, power and force, and who are concerned with how they can conscientiously and consciously use and reproduce this in their teaching and digital practices in humans-learning-with-other-humans.


Angela McFarlane’s book on technology in the classroom begins with the enticing question: ‘can we go on confiscating pupils’ smartphones indefinitely?’ As you might expect, her own response to this question is ‘no’. Throughout ‘Authentic Learning for the Digital Generation’, McFarlane maps out the contemporary landscapes of technology and education – both the hardware and tools, and the social/learning spaces enabled by these. Through this mapping she illustrates two key tensions: between a ‘real world’ in which technology-related change is constant, and UK education policy around technology which is static and under-funded, and between out of school environments in which personal devices (for both children and teachers) are embedded, agile and imperative, and in-school environments in which use of these devices is discrete, discreet and often disapproved of.

The writing is engaging and I particularly enjoyed the (what seem at first) tangential commentaries around issues the author is clearly passionate about (e.g. literacy in chapter 8 and graphing in chapter 9). However, McFarlane weaves these discussions back into the main narrative and the wide-reaching impact and potential of technology is revealed. The book covers extensive ground between chapters such as ‘devices and desires’ (chapter 2), ‘user generated content’ (chapter 4), ‘solving problems, building knowledge’ (chapter 5). In places the coverage of issues feels a little shallow, for example the positioning of online ‘lurkers’ through the lens of legitimate peripheral participation (p. 89). Expansion of this idea beyond a paragraph would have made for interesting reading. But perhaps brevity is the consequence of the comprehensive focus. The text is clearly informed by the wider literature, and readers are directed towards a range of empirical and conceptual pieces in each chapter, should they want to explore an idea further.

Other sections seem self-evident, for example ‘Modelling online citizenship’ (p. 48) which warns teachers to be aware of their online footprint. Then again, other practical tips for teachers such as ensuring devices have robust cases and long-life batteries, the importance of having spare devices, the importance of compatibility between devices might be second nature in a home environment. But as McFarlane reports, a lack of attention to (or resources for) these issues in classrooms have been shown to be real barriers to effective and sustained technology use.

One chapter which stood out for me was chapter 7: Games and play. Here McFarlane highlights the lack of research into how digital game-playing can support learning and, more crucially, the mismatch between the kinds of skills games are known to develop, and the kinds of skills which are recognised and valued in standardised testing. This mismatch is used to frame an insightful (and slightly bleak) debate around what learning is, and what it is for, and the consequences of this for the reputation of gaming – and gamers. This chapter presents a case study of a game called *Machinarium* which was used in a British Council-led collaboration between teachers and researchers from India and the UK. The team adopted a framework of learning objectives across different dimensions, needed to ‘underpin an authentic learning experience in a digital world’ (p. 103). The subsequent project report suggested that pupils who engaged with *Machinarium* were able to demonstrate enhanced skills across these dimensions.

McFarlane uses this example to reiterate one of the key messages of the book: learning through or with digital devices, platforms and programmes is enhanced (and in some cases, only possible) when activities are structured and guided or mediated.

Chapter 7 is so readable because of its use of a real-world case study, and illustrations. More consistent use of these across the other chapters would have enhanced the usefulness of the book. So much of digital worlds is visual, and this is not represented here. If a key intended readership of the book is teachers, as the back page suggests, then more illustrations and examples would make arguments for different approaches and tools more convincing. In chapter 4 (Collaborative places) for example, McFarlane describes what a virtual learning environment (VLE) can do for a school. She explains – reasonably – that a review of current products would fill a book in itself, and would date the text quickly. But it is very difficult to convey – through text alone – the opportunities enabled by a VLE. The description makes sense to someone who is already familiar with shared online spaces, but surely the purpose is to encourage and entice teachers and staff who are not. It’s hard to feel excited by: ‘a navigable storage system through which teachers can signpost and students can access a range of content and tools’. A real-life example of how a VLE can work in a school, or some screen-shots of a VLE workspace, or a case study from a teacher or student who uses a VLE would have brought this chapter to life.

In the final chapter, McFarlane charts a course for the future. This future is, in part, stifled by the difficulty of developing policies based around research findings that consistently show that the effects of technology on learning are unpredictable, and that teachers and pedagogy – not equipment – are the key variables. What is also unpredictable is the speed and direction of changing technology. Indeed, one of the main challenges in *writing about* technology is the speed at which data becomes dated. A lack of research in this field is an issue McFarlane highlights, but even so relying on what does exist puts the
text at risk of being obsolete before it is published: most of the references in chapter 4 (Collaborative Places) are more than a decade old. Chapter 9 (Manipulating data, seeing patterns) highlights the ‘encouraging’ evidence that digital tools can help to remedy skill deficits in young children’s understanding of graphing, but this evidence is twenty years old. Notwithstanding, the central arguments of this book – the need to constantly challenge the purpose of education and how this can best be supported with different forms of tools and teaching – are enduring. Authentic Learning for the digital generation will serve as a useful reference guide for teachers, as well as providing ideas and inspiration for those new to using technology in the classroom. Read it, but read it soon.


Published in January 2016, this book is based on a recent cross-European research project, ‘e-Engagement Against Violence’ (e-EAV), which ran from 2012 to 2014 and included research partners from seven EU member states. The project comprised two separate research strands, which are reflected in the structure of the book. First, a discursive approach known as Critical Frame Analysis was used in order to analyse populist communicative strategies online. For clarity, Ranieri sets out the definition of populism as used by the project as ‘an explorative concept through which right-wing organisations construct and locate the “others” out of the people’ by making them objects of discrimination and exclusion’ (Ranieri, 2016, p. 2). In contrast, the second part of the project involved an action research-based approach to design, implement and evaluate media literacy education practices, to improve young peoples’ awareness of the issues online and enhance civic engagement.

The book is divided into three parts. The first three chapters are focused on the theory of the three conceptual strands which run throughout the book: right-wing populism, online communicative strategies, and media literacy. In the first chapter, Krasteva and Lazaridis expand on Ranieri’s initial definition of ‘populism’ by discussing the history and multiplicity of the term, and the social conditions which have led to its resurgence in recent years. The problem of defining populism is a starting point for Chapter 2, in which Sauer and Pingard describe how the move to an online environment has changed the processes by which populists set their bounds between ‘the people’ and ‘others’ from being centred upon the rhetoric of key individuals, to a distributed, multimodal strategy. This also sets the methodological rationale for the e-EAV project itself, which utilised critical frame analysis for text and discursive analysis, and a denotation-connotation approach to visual analysis of imagery. Chapter 3 makes explicit the potential link with education, through linking media literacy to citizenship education (Ranieri, Fabbro and de Theux). A lot of ground is covered in the first three chapters, theoretically, conceptually and methodologically, but the reader is prepared for the context of the research project.

The three chapters in the middle section of the book report the findings of the strand of the project concerned with populist communicative strategies online. The results draw upon texts from a range of populist parties across the seven states involved to which critical frame analysis was applied. Each chapter takes a different perspective which may be adopted by populists as a mechanism for ‘othering’; on the basis of race, gender, or elites. Pajnik, Fabbro and Kamenova in chapter 4 describe the ways in which migrants are constructed as a threat to nations in the online populist discourse. Similarly, in chapter 5, Staykova, Otova and Ivanova address the data and critical frame analysis from the perspective of how anti-elitism sentiment is used in populist discourse. Together, the three chapters in this section provide the reader with a solid introduction to understanding how populist discourse plays out online, which will sadly be of increasing relevance to educational researchers and practitioners in the current political climate. This section is also of interest to educational researchers as a rigorously worked example of how to apply critical frame analysis, which is an uncommon approach in Educational Technology research. The only aspect which is not fully explored is the role of the online environment and nuances of particular online media channels themselves. While care is taken to include a variety of types of media sources, the findings are somewhat unsurprising and largely mirror pre-existing, ‘offline’ modes of populist discourse. More could have been done to explore the particular affordances of the online environment and different tools, which may have provided a bridge between the second and third sections of the book. No comparative work is undertaken between discourses as mediated by different platforms, for example.

In the third section of the book, the focus is turned to education and media literacy as a counter to the threat of populism online. In chapter 7, Ranieri, Fabbro and Frelih introduce the ethos and methods of the education strand of the e-EAV project. Five modules were developed in the spirit of critical media literacy, and deployed across the seven member states included in the project. The intervention was assessed and evaluated by tests, questionnaires and educators performing the role of action researchers. Slightly frustrating is the lack of detail about the design and content of the modules themselves; the reader is directed to a different volume which addresses this content separately (Ranieri, 2015). The structure, contents and rationale of the modules is described in greater detail later in the book, in the penultimate chapter. The chapter gives an overview of the findings from this phase of the project through three broad themes. First, the difficulties of undertaking such an intervention and reasons for mixed results in practice (it is particularly refreshing and informative to see a balanced view of an intervention). Second, the importance of taking a critical media literacy approach and value in linking critical analysis with creative production of media in turn by students. Third, the study suggests that the students’ projects confirm
the beneficial link between media literacy and citizen education. In chapter 8, Jehel and Magis focus upon the French setting in order to present an answer to the specific question of “to what extent can media education help fight against hateful and xenophobic speeches”? (p. 147). It becomes clear here that the ‘media’ in focus has pivoted between the different sections of the book; whilst the section focused on online media, the educational modules which form the basis of the third section focus upon entertainment media. In chapter 9, the perspective is shifted back on to the development process behind the modules. Orban de Xivry and Culot discuss how teachers were engaged as partners and co-designers in developing the module contents. This chapter is of particular interest to educational technologists and learning designers, both in terms of developing similar modules, and the strategies which were used to collect data and involve teachers in the development process.

In the concluding chapter, Ranieri draws upon the examples explored throughout the book to succinctly summarise the projects’ findings in relation to its main goals. In terms of understanding how populist discourses play out online, the findings underscore how traditional populist arguments have been transferred into, rather than transformed by, the online environment. In relation to the education strand of the project, the research here illustrates that while media education shows good promise in potentially tackling discrimination, it is not a straightforward task but rather complicated by a range of cultural and pedagogic factors. While the book goes some way towards answering both questions, it also opens up many more avenues for enquiry. The role of the online environment specifically within populist discourses and what it particularly affords is under-played, and acknowledging the messiness and complexity of educational interventions as a strategy requires further work to unpack. Given the current political climate, this book is both incredibly timely and also left behind somewhat by the global political events that would take place later in 2016. Since the e-AVP project was conducted, right-wing populism has continued to make political gains, although the movements which have gained ground are not always those included in the study (in the UK for example, the BNP was the object of study, while it is arguably UKIP which has used populist strategies to make headway at the ballot box in recent years). The focus on media literacy through entertainment media did not anticipate the current furore around fake news for example, which may have called for more of an information literacy-based stance. Both issues of online discourse and education in relation to populism and extremism are sadly likely to grow in importance in the current global political climate, and this book provides a good empirical foundation for further future work to build upon.

This is an ambitious book which covers a lot of ground. The second and third sections of the book could easily have been expanded into separate volumes in their own right. While further detail would have been desirable in places, it is nonetheless a very valuable introduction and provides a good entry point to research on populism and critical media literacy for any educational researcher.


Massive Open Online Courses (MOOCs) have diverted many researchers’ attention from the OER literature. This was the case for Jeremy Knox, the author of “Posthumanism and the Massive Online Courses—Contaminating the Subject of Global Education”. This book discusses critically different issues around these courses including 1) the classical cMOOCs versus xMOOCs distinction, 2) humanism, post-humanism, transhumanism and MOOCs, 3) inequalities, exclusions, discriminations and the colonial agenda, 4) loss of diversity and the closeness in MOOCs, 5) over-promotion of the offering department and elite university and 6) partial data in platform-based MOOC research reports. The book wraps up with a reminder on the complexity of MOOCs that influences and is influenced by many issues.

**Introduction**

Knox (2016) highlights his first encounter with the concept of MOOCs that occurred when he was reviewing the literature on OER. This is indeed the experience Jeremy Knox and I share as my interest in MOOCs emerged from the recurrence of the concept in the OER literature I was reviewing. Jeremy Knox and I also share the experience of the eLearning and Digital Culture (EDC) MOOC discussed later, although I was a participant researcher while he was in the course teaching team.

**Assumptions, Claims and Revisiting the cMOOC/xMOOC Distinction**

In introduction, Knox (2016, p. 2) questions the assumption that MOOC students are independent learners who are desperate for western education. This assumption reflects claims that were made by MOOC pioneers (see Thrun, 2012 and Koller, 2012) on the global target of the courses, mainly reaching African learners who are not included in the higher education systems. However, Knox discusses, in later chapters, how MOOC studies, mainly the ones based on data released by MOOC providers, reveal how these courses were designed to discriminate and exclude, and African learners have been among the most excluded. While earlier studies tended to distinguish connectivist MOOCs (cMOOCs) from extension MOOCs (xMOOCs) in terms of connectivist pedagogy versus behaviourist/constructivist pedagogy (Rodriguez, 2012), Knox distinguishes the two types of MOOCs on the basis of their emphasis on pedagogy/course design (cMOOCs) or technology (xMOOCs): cMOOCs have been promoting the connectivist pedagogical design while xMOOCs have been promoting technological innovations (p. 16).

**Humanism, Posthumanism, Transhumanism and the MOOC**

In Chapter 1, Knox (2016, p. 28) highlights that humanism is often associated with the intellectual activity of enlightenment that can be achieved independently by a maturing person. Knox went further to define humanism
on the basis of Braidotti’s suggestion that self-regulation coupled with technology-enhanced learning may lead to perfectibility of humans, and argues that this formulation of enlightenment is the premise of the MOOC project (p. 28). He also contends that education is indispensable for humanism since educational activities are motivated by an agenda to enable the achievement of innate potentials (p. 30). Knox acknowledges that the humanist perspective is questioned by posthumanism, mainly the critical posthumanism that challenges rationality and autonomy in man’s enlightenment and transhumanism that advances scientific and technological enhancement of the human condition (p. 33–34).

**Inequalities, Exclusions, Discriminations and the Colonial Agenda**

In Chapter 2, Knox (2016) contends that the world maps produced in researching MOOCs reveal the digital divide (and social economic inequalities), which compromises the global access agenda claimed by MOOC pioneers. At the same time, he argues that these world maps reveal how MOOC providers contribute to educational inequalities, exclusions and discriminations through the delivery of their courses relying upon disproportionate access to technologies (pp. 60 and 70). These inequalities, exclusions and discriminations may justify the non-participation of learners from low income families in under-sourced settings who constitute the overwhelming majority in their respective countries (Grainger, 2013; Guo and Reinecke, 2014). Knox argues that while settings that are identified on the world map as densely populated by active MOOC participants are already victims of data colonisation, the ones in which there is less participation, such as Africa and Latin America, may be spaces for future colonisation or expansion, where education from elite universities may be exported.

**Loss of Diversity and Closeness in MOOCs**

In Chapter 3, Knox (2016) argues that both the MOOC participation measurement strategies and predefinition of the mode of connectivist engagement close down educational opportunities (p. 106). More specific to participation measurement strategies, Knox (p. 105) argues that obsession in data driven utilitarianism, calculation and measurement leads to the loss of richness and diversity in MOOC participation. As for connectivism, it creates conditions for exclusion and closure of education that is claimed to be open by not giving value to engagement with course assessment (p. 106). Connectivism also tends to enforce participation that reflects a community of practice, which compromises the openness and autonomy that the same theory claims to promote (p. 107). MOOC participation measurement strategies and the pre-defined mode of connectivist engagement convey a colonial tendency that privileges certain behaviours over others. Relative to the data colonisation mentioned earlier, a negative reaction to the data captured led to referring to auditing learners as “lurkers” (Knox, 2016, p. 101). Knox also suggests that the use of the auditing concept on learners who do not actively participate in MOOCs may suggest a legitimisation of lurking (p. 103). Given that auditing students are often welcomed in conventional education, and indeed, this welcome is a recruitment strategy, the negative connotations associated with auditing learners in MOOCs may mask an agenda to either marginalise these courses or the enrolers who choose not to engage with these courses. Choices not to actively participate in MOOCs may be motivated by many reasons, including the lack of value for learners, such as assessment and credible certificate, and the reluctance to give away personal data.

**Over-promotion of the Offering Department and/or University**

Knox (2016) explores, in chapter 4, the contemplation of the local context in Modern and Contemporary American Poetry, a MOOC offered by the University of Pennsylvania via the Coursera platform. Too much focus on the location and building of the offering department in this course seems to have jeopardised openness and the global reach agendas claimed by MOOC pioneers. This domestic focus and the over-promotion of the offering department inherently expose the elitism, exclusivity and inaccessibility of education in elite institutions (Knox, 2016, p. 130). Knox notes how students in other settings (Scotland, for instance) defied the excessive focus on the offering university’s campus as an authentic setting to attend the course and created their own context for learning the MOOC (p. 156). Such a practice of the learners creating their own context in which to study MOOCs whose design was not informed by the diversity of participants was discussed in Nkuyubwatsi (2014) as cultural translation and re-contextualisation undertaken by the learners themselves.

**Partial Data in Platform-based MOOC Research Reports**

In Chapter 5, Knox (2016) argues that exclusive focus on platform activities misses learning activities enabled by social media (p. 170). In the EDC MOOC, some participants preferred engaging in the course learning activities using social media (p. 178) and there was an associative, hybrid and co-constitutive relation between the EDC MOOC hosted in the Coursera platform and social media used by the learners (pp. 180–181). EDC is not the only MOOC in which learning was significantly enabled by social media. Nkuyubwatsi (2016) highlights other MOOCs in which social media enabled learning for many learners: SSY (Sustainability Society and You) offered by the University of Nottingham, a MOOC offered by the University of Pennsylvania, AT21CS (Assessing and Teaching 21st Century Skills) offered by the University of Melbourne and LTO (Learning to Teach Online) offered by the University of New South Wales. Knox highlights the fact that research reports that fail to include data from MOOC learning activities which are enabled by social media do not convey an accurate picture on learning in these courses.

Knox (2016) concludes his book with an invitation to conceptualise MOOCs as a complex system that defines
and is defined by a diversity of issues: policies, curricula, digital technologies and infrastructure, institutional strategies and practices, approaches to pedagogies, experience and attitude to learning (p. 217).

Conclusion
The book “Posthumanism and the Massive Open Online Courses-Contaminating the Subject of Global Education” critiques many issues around the MOOC project. Assumptions, claims and the cMOOC versus xMOOC distinction are critically discussed in the Introduction followed by a critique of enlightenment and perfectibility of humans enabled by self-regulation coupled with technology-enhanced learning in Chapter 1. Then, inequalities, exclusions, discriminations and colonial agenda that have been propagated by the MOOC project are critiqued in Chapter 2. Chapter 3 questions strategies used to measure MOOC participation and predefinition and enforcement of connectivist engagement that threaten diversity and openness in MOOCs. Chapter 4 critiques the over-promotion of the provider department and/or university as an authentic place for learning, which exposes elitism, exclusivity and inaccessibility of elite institutions. The chapter also discusses MOOC students’ creation of their own learning context. The final chapter (Chapter 5) critiques the limitations of platform-based research reports that miss data on learning enabled by social media. The book is a great contribution that points out diverse issues surrounding MOOCs that are worth giving consideration and attention, especially for MOOC pioneers, researchers, fund providers and policy makers.

Note

Competing Interests
The authors have no competing interests to declare.

References